



**Max-Planck-Institut
für Sonnensystemforschung**

*Max Planck Institute
for Solar System Research*

Tätigkeitsbericht 2011
Activity Report 2011



MAX-PLANCK-GESELLSCHAFT

Inhalt**Contents**

1 Wissenschaftliche Zusammenarbeit <i>Scientific collaborations</i>	2
1.1 Wissenschaftliche Gäste <i>Scientific guests</i>	2
1.2 Aufenthalt von MPS-Wissenschaftlern an anderen Instituten <i>Stay of MPS scientists at other institutes</i>	4
1.3 Projekte in Zusammenarbeit mit anderen Institutionen <i>Projects in collaboration with other institutions</i>	5
2 Vorschläge und Anträge <i>Proposals</i>	22
2.1 Projektvorschläge <i>Project proposals</i>	22
2.2 Anträge auf Beobachtungszeit <i>Observing time proposals</i>	23
3 Publikationen <i>Publications</i>	25
3.1 Referierte Publikationen <i>Refereed publications</i>	25
3.2 Doktorarbeiten <i>PhD theses</i>	45
4 Vorträge und Poster <i>Talks and posters</i>	46
5 Seminare <i>Seminars</i>	69
6 Lehrtätigkeit <i>Lectures</i>	73
7 Tagungen und Workshops <i>Conferences and workshops</i>	74
7.1 Organisation von Tagungen und Workshops <i>Organization of conferences and workshops</i>	74
7.2 Convener bei wissenschaftlichen Tagungen <i>Convener during scientific meetings</i>	74
8 Gutachtertätigkeit für wissenschaftliche Zeitschriften <i>Reviews for scientific journals</i>	75
9 Herausgebertätigkeit <i>Editorship</i>	76
10 Mitgliedschaft in wissenschaftlichen Gremien <i>Membership in scientific councils</i>	76
11 Auszeichnungen <i>Awards</i>	77

1. Wissenschaftliche Zusammenarbeit / *Scientific collaborations*

1.1 Wissenschaftlich Gäste (mit Aufenthalt ≥ 1 Woche)

Scientific guests (with stay ≥ 1 week)

Jaime Araneda (University of Concepcion, Chile), 1 Jul - 15 Aug (host: E. Marsch)

Ankit Barik (Indian Institute of Technology, Kharagpur, India), 19 May - 15 Jul (host: U. Christensen)

Alexander Bazilevsky (Vernadsky Institute, Russian Academy of Sciences, Moscow, Russia), 1 Aug - 26 Aug (host: W. Markiewicz)

Jishnu Bhattacharya (Indian Institute of Technology, Kanpur, India), 10 May – 18 Jul (host: L. Gizon)

Satadru Bhattacharya (Planetary Sciences and Marine Optic Division, ISRO, Ahmedabad, India), 15 Apr - 14 Jun (host: A. Nathues)

Bidja Binay Karak (Indian Institute of Science, Bangalore, India), 2 Apr - 19 Jul (host: S. K. Solanki)

Nikolai Borisov (IZMIRAN, Moscow, Russia), 1 Jun – 4 Jul (host: H. Krüger); 25 Nov - 30 Dec (host: M. Fraenz)

Kodagullu Chandrasekhar (Indian Institute of Astrophysics, Bangalore, India), 19 Feb - 19 Mar (host: L. Teriaca)

Mark Cheung (LMSAL, Palo Alto, USA), 19 Nov - 10 Dec (host: M. Schüssler)

Andrzej Czechowski (Space Research Center of the Polish Academy of Sciences, Warsaw, Poland), 15 Sep - 30 Nov (host: M. Hilchenbach)

Bohla Dwivedi (BHU, Banaras, India), 1 Jun - 24 Jun (host: W. Curdt)

Li Feng (Purple Mountain Observatory, Nanjing, China), 1 Jul - 28 Aug (host: B. Inhester)

Antonio Ferriz Mas (Universidad de Vigo, Orense, Spain), 15 Oct - 22 Oct (host: D. Schmitt)

Alberto Flandes (Inst. de Geofisica, UNAM, Coyoacan, Mexico), 1 Jun - 31 Jul (host: H. Krüger)

Cathleen Geiger (University of Delaware, Newark, USA), 23 Aug - 16 Sep (host: M. Hilchenbach)

Jingnan Guo (University of Genova, Italy), 5 Dec - 15 Dec (host: J. Büchner)

Jiansen He (Peking University, Beijing, China), 15 Jul - 15 Aug (host: E. Marsch)

Nikolai Ignatiev (Space Research Institute, Russian Academy of Sciences, Moscow, Russia); 14 Mar - 29 Apr, 30 Oct - 16 Dec (host: W. Markiewicz)

Emre Isik (University Istanbul, Turkey), 24 Jan - 4 Feb (host: M. Schüssler)

Kiran Jain (National Solar Observatory, Tucson, USA), 14 Oct - 22 Oct (host: S. K. Solanki)

Hyunnam Kim (School of Space Research, Kyung-Hee University, Yongin, Korea), 24 Jan - 27 Feb (host: S. K. Solanki)

Arpad Kis (Geodetic and Geophysical Research Institute, Sopron, Hungary), 13 Nov - 19 Nov (host: P. Daly, E. Kronberg)

Ludmilla Kolokolova (University of Maryland, College Park, USA), 28 Apr - 27 May (host: H. Boehnhardt)

Viktor Korokhin (Astronomical Institute of Kharkov National University, Kharkov, Ukraine), 1 Sep - 2 Nov (host: U. Mall)

Konrad Kossacki (Institute of Geophysics, Warsaw University, Warsaw, Poland), 2 Sep - 26 Sep (host: W. Markiewicz)

Nitish Kumar (Indian Institute of Technology, Kharagpur, India), 18 May – 19 July (host: L. Gizon)

Pankaj Kumar (Korea Astronomy and Space Science Institute (KASI), Daejeon, Korea), 2 Oct - 10 Oct (host: D. Innes)

Takeshi Kuroda (Tohoku University, Sendai, Japan), 27 Apr - 23 May (host: P. Hartogh)

Gordon MacDonald (California State University, Northridge, USA), 26 Jan - 21 May (host: S. K. Solanki)

Ajai Manglik (National Geophysical Research Institute, Hyderabad, India), 1 Aug - 30 Sep (host: U. Christensen)

Pauline Martin, (Institut Supérieur de l'Aéronautique et de l'Espace, Toulouse, France), 1 Feb – 31 Jul (host: L. Gizon)

Marilena Mierla (Inst of Geodynamics of the Romanian Academy, Bucharest, Romania), 17 Jul - 9 Sep (host: B. Inhester)

Karri Muinonen (University of Helsinki, Finland), 4 Apr - 21 Apr (host: H. Boehnhardt)

Dieter Nickeler (Astronomical Institute AV CR, Ondrejov, Czech Republic), 3 May - 30 May (host: T. Wiegemann)

Naoto Nishizuka (Japan Aerospace Exploration Agency, Kanagawa, Japan), 12 May - 20 May (host: J. Büchner)

Antonius Otto (University of Alaska, Fairbanks, USA), 30 Oct - 27 Nov (host: J. Büchner)

Javier Peralta (The Center for Astronomy and Astrophysics of the University of Lisbon, Portugal), 9 May - 8 Jul (host: W. Markiewicz)

Arakel Petrosyan (Space Research Institute, Moscow, Russia), 27 Nov - 4 Dec (host: U. Christensen)

Elena Petrova (Space Research Institute, Russian Academy of Sciences, Moscow, Russia), 19 Feb - 19 Mar (host: W. Markiewicz)

Elena Petrova (Space Research Institute, Russian Academy of Sciences, Moscow, Russia), 18 Sep - 16 Dec (host: W. Markiewicz)

Thomas Philippe (Institut Supérieur de l'Aéronautique et de l'Espace, Toulouse, France), 4 Jul – 29 Jul (host: L. Gizon)

Alexander Pogoreltsev (Russian State Hydrometeorological University, St. Petersburg, Russia), 14 Mar - 8 Apr (host: P. Hartogh)

Katerina Radioti (LPAP - Université de Liège, Belgium), 9 May - 10 Jun (host: E. Roussos)

Vishnu Reddy Kanapuru (University of North Dakota, Grand Forks, USA), 18 Mar - 16 Oct (host: A. Nathues)

Anatoli Remizov (Space Research Institute, Russian Academy of Sciences, Moscow, Russia), 1 Mar - 29 Jun, 6 Nov - 20 Jan (host: M. Hilchenbach)

Jean-Baptiste Ruffio (Institut Supérieur de l'Aéronautique et de l'Espace, Toulouse, France), 4 July – 9 Aug (host: L. Gizon)

Jouni Rynö (Finnish Meteorological Institute, Helsinki, Finland), 30 Jun - 5 Jul (host: M. Hilchenbach)

Sergey Savin (Space Research Institute, Moscow, Russia), 10 Jul - 19 Jul (host: J. Büchner); 20 Nov - 26 Nov (host: P. Daly, E. Kronberg)

Mag Selwa (University of Lublin, Poland / NASA GSFC, Greenbelt, USA), 22 Feb - 28 Feb (host: S. K. Solanki)

Sandra Siljeström (SP Technical Research Institute of Sweden, Borås, Sweden), 20 Jul - 30 Jul (host: F. Goesmann)

Gerd Sonnemann (IAP, Kühlungsborn, Germany), 1 Mar - 31 Mar, 10 Oct - 4 Nov (host: P. Hartogh)

Durgesh Tripathi (Inter-University Centre for Astronomy and Astrophysics, Pune, India), 9 Oct - 21 Oct (host: S. K. Solanki)

Chuanyi Tu (Peking University, Beijing, China), 15 Jul - 31 Jul (host: E. Marsch)

Brian Walsh (Boston University, USA), 11 May - 20 May (host: P. Daly); 23 May - 1 Jun (host: E. Kronberg)

Piotr Wawer (Centrum Badan Kosmicznych, Polska Akademia Nauk, Warszawa, Polen), 3 Nov - 11 Nov (host: U. Mall)

1.2 Aufenthalt (≥ 1 Woche) von Wissenschaftlern des MPS an anderen Instituten

Visits (≥ 1 week) of MPS scientists to other institutes

Hermann Boehnhardt: ESO, Garching, Germany, 6 Sep - 7 Oct, 14 Nov - 9 Dec

Raymond Burston: CoRA, Boulder, USA, 2 Sep - 12 Sep
Stanford University, Palo Alto, USA, 12 Sep - 27 Sep

Laurent Gizon: Indian Institute of Astrophysics, Bangalore, India, 16 Sep – 2 Oct

Fred Goesmann: Research Vessel Lance, Longyearbyen, Norway, 6 Aug - 24 Aug

Pablo Gutierrez-Marques: UCLA, Los Angeles, USA, 23 Jul - 17 Aug ; 15 Oct - 4 Nov

Peter Kollmann: Applied Physics Lab, John Hopkins University, Laurel, USA, 19 Apr - 26 Apr

Elena Kronberg: UCLA, Los Angeles, USA, 16 Oct - 29 Oct

Harald Krüger: Center for Planetary Science, Kobe University, Kobe, Japan, 28 Nov - 16 Dec

Hardi Peter: Peking University, Beijing, China, 8 Nov - 17 Nov

Miriam Rengel: SRON, Groningen, The Netherlands, 9 Oct - 14 Oct

Hannah Schunker: CoRA, Boulder, USA, 2 Sep - 12 Sep
Stanford University, Palo Alto, USA, 12 Sep - 26 Sep

Colin Snodgrass: Las Cumbres Observatory, Santa Barbara, CA, USA, 16 Mar - 31 Mar
ESO, Chile, 2 Mar - 13 Mar, 27 Jul - 2 Sep
Al Subai Establishment for Scientific Studies, Doha, Qatar, 2 Nov - 13 Nov

Sami K. Solanki: School of Space Research, Kyung-Hee University, Yongin, Korea, 31 Aug - 14 Dec

1.3 Projekte in Zusammenarbeit mit anderen Institutionen

Projects in collaboration with other institutions

Analysis and calibration of historical Ca II spectroheliograms

N. A. Krivova and S.K. Solanki in collaboration with I. Ermolli (INAF Osservatorio Astronomico di Roma, Italy).

Asymmetry of bipolar active regions

D. Schmitt in collaboration with A. Ferriz Mas (Universidad de Vigo, Orense, Spain).

ASTROD I (Astrodynamical Space Test of Relativity using Optical Devices I)

L. Gizon and R. Burston in collaboration with T. Appourchaux (IAS, Orsay, France); W.-T. Ni (Purple Mountain Observatory, Nanjing, China).

Astrophysical spectropolarimetry

A. Gandorfer in collaboration with M. Bianda (IRSOL, Switzerland).

BEIRUS

U. Mall in collaboration with H. Nothaft, Siek (AIM, Heilbronn, Germany).

BepiColombo – BELA (Laser Altimeter)

M. Hilchenbach, U. Christensen, R. Kallenbach and H. Perplies in collaboration with N. Thomas, W. Benz, K. Gunderson, K. Seiferlin (Physikalisches Institut, Universität Bern, Switzerland); T. Spohn, E. Hauber, H. Michaelis, J. Oberst (DLR – Institut für Planetenforschung, Berlin, Germany); G. Beutler (Astronomisches Institut, Universität Bern, Switzerland); C. Fallnich (Laser Zentrum Hannover, Germany); D. Giardini (Institute of Geophysics, ETHZ, Zurich, Switzerland); O. Groussin (University of Maryland, College Park, USA); L. Jorda, P. Lamy (Laboratoire d’Astrophysique de Marseille, Marseille, France); L.-M. Lara, J. J. Lopez-Moreno, R. Rodrigo (Instituto de Astrofísica de Andalucía, Granada, Spain); P. Lognonné (Institut de Physique du Globe de Paris, Saint Maur des Fossés, France); D. Resendes (Instituto Superior Técnico, Universidade Técnica de Lisboa, Lisboa, Portugal).

BepiColombo – MIXS

M. Hilchenbach in collaboration with G.W. Fraser (PI) (University of Leicester, UK).

BepiColombo – MPPE-MSA (Mass Spectrum Analyzer as part of the Mercury Plasma Particle Experiment)

N. Krupp, M. Fränz, A. Loose, H. Fischer, and U. Bührke in collaboration with D. Delcourt (Laboratoire de Physique des Plasmas - LPP, Paris, France); Y. Saito (Jaxa/ISAS, Tokyo, Japan).

BepiColombo – PICAM (Planetary Ion CAMera) – Detector unit of the Neutral and Charge Particle Analyzers SERENA (Search for Exospheric Refilling and Emitted Natural Abundances).

M. Fränz, N. Krupp, A. Loose, and J. Woch in collaboration with S. Orsini (PI) (IFSI, Roma, Italy); K. Torkar (Institut für Weltraumforschung, Graz, Austria); J.-J. Berthelier (LPP-CNRS, St. Maur des Fossés, France); P. Escoubet (ESTEC, Noordwijk, The Netherlands); F. Leblanc (IPSL, Verrières-Le-Buisson, France); K. Szego (KFKI, Budapest, Hungary); O. Vaisberg (IKI, Moscow, Russia).

CASSINI – MIMI/LEMMS (Low Energy Magnetospheric Measurement System of the Magnetospheric Imaging Instrument: data analysis).

N. Krupp, E. Roussos, P. Kollmann, A. Lagg, A. Müller and Z. Bebesi in collaboration with S. M. Krimigis, S. Livi, D. G. Mitchell (Applied Physics Laboratory, Johns Hopkins University, Laurel, MD, USA); D. Hamilton (University of Maryland, College Park, MD, USA); I. Dandouras (CESR, Toulouse, France); T. P. Armstrong (Fundamental Technologies, Kansas, USA).

CAST (CERN Axion Solar Telescope)

T. Rashba, S.K. Solanki and L. Gizon in collaboration with CAST experiment team (CERN, Genève, Switzerland).

Chandrayaan-1 – SIR-2

U. Mall in collaboration with N. Goswami (PRL, Ahmedabad, India).

CHOPPER

U. Mall in collaboration with P. Wurz, K. Altwegg (Universität Bern, Switzerland).

Climate forcing reconstructions for use in PMIP simulations of the Last Millennium

N. Krivova and S.K. Solanki in collaboration with G.A. Schmidt, D.T. Schindell (NASA Goddard Institute for Space Studies and Center for Climate Systems Research, Columbia University, New York, USA); J.H. Jungclaus (MPI for Meteorologie, Hamburg, Germany); C.M. Ammann, B.L. Otto-Bliesner (NCAR, Boulder, USA); T.J. Crowley (School of GeoSciences, University of Edinburgh, UK); F. Joos (University of Bern, Switzerland); G. Delaygue (Université Joseph Fourier -Grenoble/CNRS, France); R. Muscheler (Lund University, Sweden); F. Steinhilber (Carnegie Institution of Washington, Stanford, USA); J. Pongratz (EAWAG, Duebendorf, Switzerland).

Cluster II – CIS (Cluster Ion Spectrometer)

M. Fränz, P.W. Daly, E. Kronberg and Y. Wei in collaboration with I. Dandouras (PI) (CESR, Toulouse, France); MPI für extraterrestrische Physik (Garching, Germany); Universities of New Hampshire, Washington, Seattle, Berkeley (USA).

Cluster II – RAPID (Particle spectrometer RAPID); Data analysis

P.W. Daly (PI), E. Kronberg, U. Mall, and J. Büchner in collaboration with Q.G. Zong, Z.Y. Pu, S.Y. Fu (Beijing University, Beijing, China); T.A. Fritz, (BU, Boston, USA); M. Yamauchi (IRF, Kiruna, Sweden); G. D. Reeves, R.H.W. Friedel (LANL, Los Alamos, USA); D. N. Baker (LASP, Boulder, USA); C.H. Perry, J. Davies, M. Dunlop (RAL, Didcot, UK); M.G.G.T. Taylor (ESTEC, The Netherlands); A.T.Y. Lui (APL, John Hopkins University, Laurel, USA); R. Nakamura (IWF, Graz, Austria); K. Nykyri (Embry-Riddle University, Daytona, USA); Arpad Kis (Geodetic and Geophysical Institute, Hungarian Academy of Science, Sopron, Hungary); Y. Shpits (UCLA, Los Angeles, USA); E. Grigorenko (IKI, Moscow, Russia).

Cluster Active Archive and German Cluster Data Centre (CAA, GCDC, archiving of RAPID-EDI data)

P.W. Daly, E. Kronberg, and E. Georgescu in collaboration with M. Taylor, H. Laakso (ESA); C. H. Perry, J. Davies (RAL, Didcot, UK).

Comparative analysis of plasma environment at Mars and Venus

M. Fränz in collaboration with U. Motschmann, K. H. Glassmeier (TU Braunschweig, Germany).

Comparative helioseismic study of Active Region 9787

L. Gizon, H. Moradi, and H. Schunker in collaboration with A. C. Birch, D. C. Braun (CoRA, Boulder, USA); R. Bogart (Stanford University, USA); T. L. Duvall Jr. (NASA GSFC, Greenbelt, USA); I. González Hernández, R. Komm (NSO, Tucson, USA); D. Haber (JILA, Boulder, USA).

Comparison of Inversion Codes

A. Lagg and M. van Noort in collaboration with J. M. Borrero, R. Rezai (KIS, Freiburg, Germany); A. Asensio Ramos, A. Lopez Ariste, H. Socas-Navarro (IAC, La Laguna, Spain); B. Lites, M. Rempel (HAO, Boulder, USA); T. Carroll (AIP, Potsdam, Germany); N. Vitas (Sterrenkundig Instituut Utrecht, The Netherlands); B. Viticchie (ESA/ESTEC, Noordwijk, The Netherlands).

Contrasts of magnetic features from magnetoconvection simulations

M. Schüssler and S. K. Solanki in collaboration with N. Afram, Y. C. Unruh (Imperial College London, UK); A. Vögler (Astronomical Institute Utrecht, The Netherlands).

CoRoT additional program (AP) "Stellar variability and microvariability – III: convection and short term evolution of photospheric active regions".

N. A. Krivova in collaboration with Institute of Astronomy (University of Cambridge, UK); School of Physics and Astronomy (University of St. Andrews, UK); Astrophysics Group (Imperial College, London, UK).

CoRoT Program „Astroseismology of Sun-like host HD 52665“

L. Gizon and T. Stahn in collaboration with J. Ballot, S. Vauclair, G. Vauclair (Observatoire Midi-Pyrénée, Toulouse, France); E. Michel, A. Baglin (Observatoire de Paris, Meudon, France).

Cosmic-ray propagation

M. Schuessler in collaboration with B. Heber (Universität Kiel, Germany); H. Fichtner (Universität Bochum, Germany).

Cosmogenic nuclides and past solar activity

M. Schüssler and S. K. Solanki in collaboration with I. G. Usoskin (Sodankylä Geophysical Observatory, Finland); G. A. Kovaltsov (Ioffe Physical-Technical Institute, St. Petersburg, Russia).

Coupled spin models for geomagnetic reversals

D. Schmitt and J. Wicht in collaboration with N. Mori, M. Morikawa (Ochanomizu University, Tokyo, Japan); A. Ferriz Mas (Universidad de Vigo, Orense, Spain).

DAWN

A. Nathues, H. Sierks, U. Christensen, P. Gutierrez, I. Hall, L. Le Corre, T. Maue, V. Reddy, S. Schroeder, J.-B. Vincent, and M. Hofmann in collaboration with R. Jaumann, S. Mottola (DLR/Institut für Planetenforschung, Berlin, Germany); H. Michalik, B. Fiethe (Institut für Datentechnik und Kommunikationsnetze, Braunschweig, Germany); C. Russell, C. Raymond (University of California, Los Angeles, USA); K. C. Patel, E. Miller (Jet Propulsion Laboratory, Pasadena, USA).

Deep Search for Biological Signatures on Mars critically supporting the Herschel mission

P. Hartogh in collaboration with M. Mumma, G. Villanueva (NSAS GSFC, Greenbelt, USA); R. E. Novak (Iona College, New Rochelle, USA); H. U. Käufl (ESO, Garching, Germany).

DFG-ISDUST (Insterstellar Dust in the Solar System)

H. Krüger and P. Strub in collaboration with Nicolas Altobelli (ESA/ESAC, Villafranca, Spain); Mihaly Horanyi (LASP, University of Colorado, Boulder, USA); Veerle Sterken, Eberhard Grün, Ralf Srama (MPI für Kernphysik, Heidelberg, Germany).

DFG Priority Programme 1176: Climate and Weather of the Sun-Earth-System (CAWSES). (Influence of the mean circulation on gravity wave generation)

P. Hartogh and A. Medvedev in collaboration with T. Kuroda (Tohoku University, Sendai, Japan); E. Yigit (University of Michigan, Ann Arbor, MI, USA)

DFG Priority Programme 1176: Climate and Weather of the Sun-Earth-System (CAWSES).

Investigation of the solar influence on middle atmospheric water vapour and ozone during the last solar cycle – analysis of the MPS data set.

P. Hartogh and C. Jarchow in collaboration with G. Sonnemann, U. Berger, M. Grygalashvily (Leibniz-Institut für Atmosphärenphysik, Kühlungsborn, Germany).

DFG Priority Programme 1176: Climate and Weather of the Sun-Earth-System (CAWSES). Support proposal for refurbishment and replacement of a microwave spectrometer to be used in the priority programme CAWSES.

P. Hartogh, C. Jarchow, and K. Hallgren in collaboration with F.-J. Lübken (Leibniz- Institut für Atmosphärenphysik, Kühlungsborn, Germany).

DFG Priority Programme 1176: Climate and Weather of the Sun-Earth-System (CAWSES). Models of solar total and spectral irradiance variability of relevance for climate studies (SOLIVAR).

N. A. Krivova and S. K. Solanki in collaboration with Freie Universität Berlin (Germany); Institut für Umweltphysik (Universität Bremen, Germany); MPI für Meteorologie (Hamburg, Germany).

DFG Priority Programme 1488 - Planetary Magnetism. Intrinsic and Induced Magnetic Fields of the Terrestrial Planets and Their Influence on Atmospheric Escape and Water Inventory.

M. Fraenz, Y. Wei, E. Dubinin, and J. Woch in collaboration with U. Motschmann (TU Braunschweig, Germany).

DFG Priority Programme 1488 - Planetary Magnetism. *Towards realistic models for the interior dynamics of Jupiter and Saturn.*

U. Christensen and J. Wicht in collaboration with R. Redmer (Universität Rostock, Germany); S. Stellmach (Universität Münster, Germany); N. Nettelmann (University of California, Santa Cruz, USA).

DFG Priority Programme 1488 – Planetary Magnetism. *Constraining the magnetic connection of Jupiter's and Saturn's ring planes with their stratospheres.*

P. Hartogh, M. de Val-Borro, A. Medvedev, and L. Rezac in collaboration with T. Cavalie, F. Billebaud, M. Dobrijevic (University of Bordeaux, France); J. Saur (Universität Köln; Germany); E. Lellouch, R. Moreno (Observatoire de Paris, Meudon, France).

Diagnostics of magnetoconvection

M. Schüssler, R. Cameron, and S. K. Solanki in collaboration with S. Shelyag (University of Sheffield, UK); A. Vögler (Universität Utrecht, The Netherlands).

DLR/ESA collaborative ‘Gossamer Roadmap’ for solar sail technology demonstration in orbit

L. Gizon in collaboration with M. Macdonald (University of Strathclyde, UK); R. Reinhard, R. Marsden (ESA); T. Appourchaux (IAS, Paris, France); D. Romagnoli, P. Spietz, U. R.M.E. Geppert (DLR, Germany); R. F. Wimmer-Schweingruber (Universität Kiel, Germany); T. Sekii (NOAJ, Tokyo, Japan).

Dynamics in the transition region and corona

H. Peter in collaboration with C.-Y. Tu, J. He (Peking University, Beijing, China).

EChO (Exoplanet Characterisation Observatory)

P. Hartogh, C. Jarchow, U. Mall, M. Rengel, A. Medvedev, M. de Val-Borro, L. Rezac, S. Hviid, N. Krupp, and W. Markiewicz in collaboration with G. Tinetti, B. Swinyard, G. Branduardi-Raymont (University College London, UK); J.-P. Beaulieu, M. Ollivier (Institut d'Astrophysique de Paris, France); G. Micela, G. Malaguti, G. Piccioni, A. Sozzetti (INAF Osservatorio Astronomico di Palermo, Italy); H.U. Nørgaard-Nielsen, A. Hornstrup (Danish Space Research Institute, Copenhagen, Denmark); I. Ribas, M. Lopez-Morales (CSIC-ICE, Bellaterra, Spain); M. Swain, P. Deroo (JPL, Pasadena, USA); N. Bowles (University of Oxford, UK); V. Coudé du Foresto, A. Coustenis (Observatoire de Paris, France); M.R. Zapatero Osorio (INTA-CAB, Madrid, Spain); D. Grodent (Université de Liège, Belgium); G. Kovacs (Konkoly Observatory, Budapest, Hungary); P.-O. Lagage (CEA-Saclay, France); T. Lim (Rutherford Appleton Laboratory, Didcot, UK); E. Pace (Università di Firenze, Italy); Enric Palle (Instituto de Astrofísica de Canarias, Tenerife, Spain); E. Pascale (Cardiff University, UK); G. Wright (UK Astronomy Technology Centre, Edinburgh, UK).

European Solar Telescope (EST)

A. Feller, J. Hirzberger and S.K. Solanki in collaboration with B. Gelly, A. Lopez-Ariste (Themis S.L., Tenerife, Spain); C. Keller, F. Bettonvil (Utrecht University, Utrecht, The Netherlands); R. Volkmer, T. Kentischer (Kiepenheuer Institut für Sonnenphysik, Freiburg, Germany); M. Collados (Instituto de Astrofísica de Canarias, La Laguna, Spain); G. Scharmer (Institute for Solar Physics, Stockholm, Sweden); F. Cavallini, G. Cauzzi (INAF, Osservatorio Astrofisico di Arcetri, Florence, Italy); A. Kucera (Astronomical Institute of the Slovak Academy of Sciences, Tatranska Lomnica, Slovak Republic); F. Berrilli (Università degli Studi di Roma Tor Vergata, Rome, Italy); G. Molodij (Observatoire de Paris, Paris-Meudon, France).

EUROPLANET-RI (European Planetology Network)

N. Krupp in collaboration with IRAP (Toulouse, France); FMI Helsinki (Finland); University Nantes (France); Observatoire Paris (France); University Grenoble (France); Imperial College (London, UK); KFKI (Budapest, Hungary).

ExoMars – MOMA

F. Goesmann (PI), M. Bierwirth, H. Steininger, W. Goetz, M. Hilchenbach, O. Roders, and E. Steinmetz in collaboration with Paul Mahaffy, Will Brinckerhoff (NASA GSFC, Greenbelt, USA); L.

Becker (John Hopkins University, Baltimore, USA); R. Cotter (Johns Hopkins School of Medicine , Baltimore, USA); C. Szopa (LATMOS, Paris, France); F. Raulin (LISA, Paris, France).

ExoMars – RAMAN – LIBS

M. Hilchenbach in collaboration with F. Rull (PI) (Centro de Astrobiología (CSIC/INTA, Madrid, Spain).

Fast solar polarimeter

A. Feller in collaboration with L. Strüder (MPI Halbleiterlabor, Munich, Germany); H. Soltau (PNSensor, Munich, Germany)

Field morphology of geodynamo models

U. Christensen and J. Wicht in collaboration with A. Reiners (Universität Göttingen, Germany); P. Olson (John Hopkins University, Baltimore, USA).

Forward and inverse modeling in helio- and geophysics

L. Gizon and S.H. Hanasoge in collaboration with J. Tromp (Princeton University, USA).

Galileo – EPD (Energetic Particles Detector); Data analysis

N. Krupp and A. Lagg in collaboration with D. J. Williams, R. McEntire (Applied Physics Laboratory, John Hopkins University, Laurel, USA); S. Kasahara (Institute of Space and Astronautical Science, Sagamihara, Kanagawa, Japan); K.K. Khurana (UCLA, Los Angeles, USA).

GBSO – Ground Based Solar Observations

A. Gandorfer, J. Hirzberger, A. Lagg, A. Feller, F. Rubio da Costa and S. K. Solanki in collaboration with M. Collados (IAC, La Laguna, Tenerife, Spain); A. López Ariste (THEMIS, La Laguna, Tenerife, Spain); D. Fluri, N. Afram (ETH Zürich, Switzerland); K. Puschman, E. Wiehr (Institut für Astrophysik, Universität Göttingen, Germany); S. Stangl (Institut für Physik, Universität Graz, Austria); Kiepenheuer-Institut für Sonnenphysik (Freiburg, Germany); Institute for Solar Physics of the Royal Swedish Society (Stockholm, Sweden).

Geomagnetic dipole frequency spectrum

U. Christensen and J. Wicht in collaboration with P. Olson (John Hopkins University, Baltimore, USA); G. Glatzmaier (University of California, Santa Cruz, USA).

Gravitation and Shapiro effect

K. Wilhelm in collaboration with B. N. Dwivedi (Indian Institute of Technology, Varanasi, India).

GREGOR

A. Lagg, S. K. Solanki, A. Feller, A. Gandorfer, J. Hirzberger, and M. Van Noort in collaboration with Kiepenheuer Institut für Sonnenphysik (Freiburg, Germany); Astrophysikalisches Institut Potsdam (Germany); Instituto de Astrofísica de Canarias (La Laguna, Tenerife, Spain)

HELAS (European Helio- and Asteroseismology Network)

L. Gizon and H. Schunker in collaboration with O. von der Lühe and Markus Roth (Kiepenheuer-Institut für Sonnenphysik, Freiburg, Germany); P. Pallé (IAC, La Laguna, Tenerife, Spain); M. Thompson (University of Sheffield, UK); J. Christensen-Dalsgaard (University of Aarhus, Denmark); M. Monteiro (Center for Astrophysics, University Porto, Portugal); M. P. Di Mauro (INAF, Rome, Italy); C. Aerts (Katholieke Universiteit Leuven, Belgium); J. Daszyńska-Daszkiewicz (Uniwersytet Wrocławski, Poland); T. Corbard (CNRS, Nice, France).

Helioseismology Inversions

L. Gizon and Michal Svanda in collaboration with A. C. Birch (CoRA, Boulder, USA); T. Hohage (Göttingen University, Germany).

Helioseismology of granulation

L. Gizon in collaboration with A. C. Birch, D. C. Braun (CoRA, Boulder, USA); T. L. Duvall Jr. (NASA GSFC, USA).

Helmholtz-Allianz "Planetary Evolution and Life"

U. Christensen, J. Wicht, H. Boehnhardt, P. Hartogh and W. Dietrich in collaboration with D. Breuer, H. Rauer (DLR- Institut für Planetenforschung, Berlin, Germany); U. Hansen (Universität Münster, Germany).

HIFI-Instrument Control Centre (ICC): German contribution

P. Hartogh, M. Rengel, and C. Jarchow in collaboration with F. Helmich, R. Assendorp, I. Avruch, K. Edvards, D. Kester, C. Risacher, P. Roelfsema, R. Shipman (SRON, Groningen, The Netherlands); A. Boogert, S. Lord, P. Morris, Q. Xie, C. Borys (IPAC-CalTech, Pasadena, CA, USA); E. Caux, O. Coeur-Joly, D. Rabois (CESR, Toulouse, France); A. Lorenzani (INAF - Osservatorio Astrofisico di Arcetri, Florence, Italy); T. Marston, D. Teyssier (ESAC, Villafranca, Spain); C. McCoey (University of Waterloo, Canada); M. Melchior (Institut für 4D-Technologien, Zurich, Switzerland); V. Ossenkopf (Universität Köln, Germany); R. Moreno (LESIA, Observatoire de Paris, France); F. Herpin (Laboratoire d'Astrophysique de Bordeaux, Bordeaux, France); M. Olberg (Chalmers University of Technology, Gothenburg, Sweden); E. Sánchez Suárez (CSIC, Madrid, Spain).

Hinode data analysis

A. Lagg, M. van Noort, D. Bühler, S. Tiwari and S. K. Solanki in collaboration with National Astronomical Observatory of Japan (NAOJ); S. K. Mathew (Udaipur Observatory, India).

HssO (Herschel Solar System Observations)

M. Rengel, P. Hartogh, C. Jarchow, M. de Val-Borro, A. Gonzalez, and A. Medvedev in collaboration with M. Banaszkiewicz, M. I. Blecka, S. Szutowicz (Space Research Centre, Polish Academy of Science, Warsaw, Poland); F. P. Bensch (DLR, Bonn, Germany); E. A. Bergin (University of Michigan, Ann Arbor, USA); F. Billebaud (LAB, Observatoire de Bordeaux, France); E. Lellouch, R. Moreno, N. Biver, D. Bockele-Morvan, R. Courtin, J. Crovisier, T. Encrenaz (LESIA, Observatoire de Paris, France); G. A. Blake (California Institute of Technology, Pasadena, USA); J. Blommaert, L. Decin, B. Vandenbussche, C. Waelkens (Instituut voor Sterrenkunde, Katholieke Universiteit Leuven, Belgium) and others.

Influence of the solar spectral irradiance on stratospheric heating rates

N.A. Krivova in collaboration with U. Langematz, S. Oberländer, M. Kunze, A. Kubin (Institut für Meteorologie, FU Berlin, Germany); K. Matthes (Helmholtz-Zentrum Potsdam, Germany); J. Harder (LASP, University of Colorado, Boulder, USA).

Influence of solar spectral irradiance on stratospheric ozone concentrations

N.A. Krivova in collaboration with W.T. Ball, J.D. Haigh, Y.C. Unruh (Imperial College, London, UK).

InSight – SEIS

M.Bierwirth, U.Christensen, W.Goetz and R. Roll in collaboration with B. Banerdt, K. Hurst (JPL, Pasadena, USA); P. Lognonné, S. de Raucourt (IPGP, Paris, France); P. Zweifel, D. Mance (ETH, Zürich, Switzerland); T. Pike (Imperial College, London, UK); D. Mimoun (ISAE, Toulouse, France); S. Calcutt (Oxford University, UK); P. Lauder, L. Kerjean (CNES,Toulouse, France).

Intercomparison of MHD simulations

M. Schuessler in collaboration with M. Asplund, R. Collet (Max-Planck-Institut für Astrophysik, Garching, Germany); H. Ludwig (Universität Heidelberg, Germany); M. Steffen (AIP, Potsdam, Germany).

Internal magnetic fields of the gas giants

U. Christensen and J. Wicht in collaboration with R. Redmer (Universität Rostock, Germany); S. Stellmach (Universität Münster, Germany); N. Nettelmann (University of California, Santa Cruz, USA).

Inter-scale coupling in magnetic reconnection

J. Büchner in collaboration with M. Barta, M. Karlicky (Astronomical Institute of the Czech Academy of Science, Ondrejov, Czech Republic).

Investigation of thin current sheets in space and solar plasmas

J. Büchner in collaboration with L. Hau, K.W. Lee (National Central University of Taiwan).

ISSI Team „Nanodust“ (Nano Dust in the Solar System)

H. Krüger in collaboration with I. Mann (Kindai University, Higashi Osaka, Japan); A. Czechowski (Polish Space Research Center, Warsaw, Poland); D. Gerlich (Technische Universität, Chemnitz, Germany); V. Kharchenko (Harvard-Smithsonian Center for Astrophysics, Cambridge, USA); Y. Kimura (Tohoku University, Sendai, Japan); A. Li (University of Missouri, Columbia, USA); N. Meyer-Vernet (Observatoire de Paris, Meudon, France).

ISSI Team "Solar Chromospheric Flares"

F. Rubio da Costa in collaboration with L. Fletcher (University of Glasgow, UK); P. Heinzel (Astronomical Institute, Ondřejov, Czech Republic), B. Abbet, H. Hudson (University of California, Berkeley, USA); A. Kowalsky (University of Washington, Seattle, USA); M. Carlsson (University of Oslo, Norway).

JUICE (EJSM)-GALA (Ganymede Laser Altimeter)

R. Kallenbach in collaboration with B. Metz (Carl Zeiss Optronics GmbH, Oberkochen, Germany); T. Zeh (Kayser-Threde GmbH, München, Germany); H. Hussmann (DLR - Institut für Planetenforschung, Berlin, Germany); N. Thomas (Universität Bern, Switzerland); L. Lara (Instituto de Astrofísica de Andalucía, Granada, Spain).

JUICE (EJSM)-SWI

P. Hartogh, C. Jarchow, M. Rengel, A. Gonzales, and A. Medvedev in collaboration with E. Lellouch, P. Drossart, R. Morena, T. Fouchet, J.-M. Krieg, G. Beaudin, A. Maestrini (Observatoire de Paris, France); S. Gulkis, M. Allen, M. Janssen, and I. Mehdi (Caltech-JPL, Pasadena, USA); S. Bolton (Southwest Research Institute, San Antonio, USA); G. Chin (Goddard Space Flight Center, Greenbelt, USA); S. Barabash (IRF, Kiruna, Sweden).

JUICE (EJSM) – Pre-evaluation for a plasma instrument

N. Krupp, M. Fränz, E. Roussos and R. Kallenbach in collaboration with D. Delcourt (CETP, Paris, France); S. Barabash (Swedish Institute of Space Physics, Kiruna, Sweden)

KASC (Kepler Asteroseismic Science Consortium)

T. Stahn in collaboration with J. Christensen-Dalsgaard (PI), H. Kjeldsen (Aarhus University, Denmark); W. J. Chaplin (University of Birmingham, UK); and many others.

Kinetic physics of the solar wind

E. Marsch in collaboration with J. Araneda (Universität Concepción, Chile).

KuaFu – "Space Weather Explorer"

U. Schühle in collaboration with Chuanyi Tu (PI), J.-S. Wang (Peking University, Beijing, China); E. Donavan (University of Calgary, Canada); L.-D. Xia (School of Earth and Space Sciences, University of Science and Technology of China, Hefei, Anhui, China); Y.-W. Zhang (China Academy of Space Technology and DFH Satellite Co. Ltd, Beijing, China).

Lemur (Large European Module for solar Ultraviolet Research; European contribution to Solar-C)

L. Teriaca, W. Curdt, D. Innes, H. Peter, U. Schuehle, S.K. Solanki and T. Wiegelmans in collaboration with S. Tsuneta (NAOJ, Tokyo, Japan); S. Imada, T. Shimizu (ISAS/JAXA, Tokyo, Japan); C. M. Brown, G. A. Doschek, C. Korendyke, J. T. Mariska, H. P. W (NRL, Washington DC, USA); J. M. Davila, J. Klimchuk (NASA GSFC, Greenbelt, USA); J. L. Culhane, L. Green, L. K. Harra, B. Winter (MSSL, Dorking, UK); F. Auchère, E. Buchlin, J.-C. Vial (IAS, Orsay, France); V. Martínez-Pillet, H. Socas-Navarro, J. Trujillo-Bueno (IAC, La Laguna, Spain); V. Andretta, G. Cauzzi, S. Fineschi, D. Spadaro (INAF, Italy); S. Parenti (ROB, Brussels, Belgium); B. Kliem (IAP, University of Potsdam, Germany); G. Del Zanna (University of Cambridge, UK); S. Patsourakos (University of Ioannina, Greece); A. Fludra (RAL, Didcot, UK); M. Siemer (DLR, Bremen, Germany); L. Poletto (CNR, Padua, Italy).

Magnetic fields of low-mass stars and brown dwarfs

U. Christensen in collaboration with A. Reiners (universität Göttingen, Germany)

MAOAM (The Martian Atmosphere: Observing And Modelling)

P. Hartogh, C. Jarchow and A. Medvedev in collaboration with U. Berger, G. Sonnemann, M. Grygalashvily (IAP Kühlungsborn, Germany); T. Kuroda (ISAS, Sagamihara, Japan); H. Elbern (Institut für Geophysik und Meteorologie, Universität Köln, Germany); M. Allen (JPL, Pasadena, USA); A. Feofilov, A. Kutepov, Gordon Chin (NASA GSFC, Greenbelt, USA).

MarcoPolo-R Camera system

H. Boehnhardt in collaboration with M.A. Barucci (Observatoire de Paris, Meudon, France); P. Michel (Université de Nice, France); J.R. Brucato (INAF Osservatorio Astrofisico di Arcetri, Florence, Italy); E. Dotto (INAF Osservatorio Astronomico di Roma, Rome, Italy); I.A. Franchi, S. Green (Open University, Milton Keynes, UK); L.M. Lara (Instituto Astrofisica de Andalucia, Grenada, Spain); B. Marty (CRPG, Nancy, France).

MarcoPolo-R Laser altimeter

R. Kallenbach in collaboration with J. Oberst (TU Berlin, Germany); F. Lüdicke, H. Hussmann, K. Wickhusen, K. Lingenauber, H. Michaelis, S. Mottola (DLR - Institut für Planetenforschung, Berlin, Germany); K. Seiferlin, N. Thomas (Universität Bern, Switzerland); M. R. Santovito (CO.RI.S.T.A., Naples, Italy); V. Lupovka (Moscow State University of Geodesy and Cartography, Russia).

Mars aeronomy

M. Fraenz in collaboration with H.Opgenoorth, D. Andrews (IRF, Uppsala, Sweden).

Mars and Venus sheath waves

M. Fraenz in collaboration with N.Borisov (IZMIRAN, Troisk, Russia); E.Echer (INPE, São José dos Campos, Brasil).

Mars Express – ASPERA-3 (Analyzer of Space Plasmas and EneRgetic Atoms)

M. Fränz, J. Woch, N. Krupp, Y.Wei and E. Dubinin in collaboration with R. Lundin (PI), S. Barabash (IRF, Kiruna, Sweden); D. Winningham, R. Frahm (SWRI, San Antonio, USA); P. Wurz (Universität Bern, Switzerland); A. Coates (MSSL, London, UK); M. Grande (RAL, Didcot, UK); J. A. Sauvaud, A. Fedorov (CESR, Toulouse, France); E. Kallio (FMI, Helsinki, Finland); S. Orsini (IFSI, Roma, Italy); C. C. Curtis (University of Arizona, Tuscon, USA).

Mars Express – HRSC

W.J. Markiewicz, N. Hoekzema and O. Stenzel in collaboration with K. Gwinner, T. Roatch, H. Hofmann (DLR, Berlin, Germany); G. Neukum (FU, Berlin, Germany); L. Petrova (IKI, Moscow, Russia).

Mars Express – OMEGA

N. Hoekzema in collaboration with J.-P. Bibring, Y. Langevin, B. Gondet (Institut d'Astrophysique Spatiale, Orsay, France); P. Drossart (Observatoire de Paris, Meudon, France); N. Ignatiev (Space Research Institute, Moscow, Russia); D. Reiss (Universität Münster, Germany).

MARSIS

M. Fraenz in collaboration with Department of Physics and Astronomy (University of Iowa, Iowa City, USA); Jet Propulsion Laboratory, California Institute of Technology (Pasadena, USA); INAF Instituto di Fisica dello Spazio Interplanetario (Rome, Italy); Infocom Department (“La Sapienza” University of Rome, Italy); School of Earth and Space Sciences (Peking University, Beijing, China).

MELOS-FIRE - Mars Exploration with Lander and Orbiter Synergy - Far Infrared Experiment

P. Hartogh, C. Jarchow, and A. Medvedev in collaboration with Y. Kasai, H. Sagawa, S. Ochiachi, P. Baron (National Institute of Information and Communications Technology, Tokyo, Japan); T. Kuroda (Tohoku University, Sendai, Japan); D. Murtagh, J. Urban (Chalmers University of Technology, Gothenburg, Sweden); T. Manabe (Osaka Prefecture University, Japan); K. Kikuchi, T. Nishibori (JAXA, Tsukuba, Japan); J. Mendrok (Luleå University of Technology, Sweden).

Mercury dynamo

D. Schmitt and J. Wicht in collaboration with D. Heyner, K.-H. Glassmeier (IGEP, TU Braunschweig, Germany).

Microlensing exoplanet observations

C. Snodgrass in collaboration with K. Horne, M. Dominik, M. Hundertmark, Ch. Liebig, P. Browne, D. Bajek (University of St Andrews, St Andrews, UK); R. Street (Las Cumbres Observatory, Santa Barbara, USA); Y. Tsapras (Queen Mary University, London, UK); K. Alsubai, S. Ipatov (Al Subai Institute for Scientific Studies, Doha, Qatar); D. Bramich, N. Kains (ESO, Garching, Germany); U. Jørgensen, K. Harpsøe, J. Skottfelt (Niels Bohr Institute, Copenhagen, Denmark); R. Hessman (Universität Göttingen, Germany).

Microstructure, chemistry, and mineralogy of Martian soils. Search for alteration phases.

W. Goetz in collaboration with J. Grotzinger (Caltech, Pasadena, USA); K. S. Edgett (Malin Space Science Systems, San Diego, USA).

Micro-turbulent transport

J. Büchner in collaboration with F. Jenko, Moritz Püschel (IPP, Garching, Germany).

Millennium – climate simulations for the last millennium using the Earth System Model (ESM)

N. A. Krivova and S. K. Solanki in collaboration with Max-Planck-Institut für Meteorologie (Hamburg, Germany); Freie Universität Berlin (Berlin, Germany).

Mode analysis of geodynamo models

D. Schmitt in collaboration with M. Schrinner (Ecole Normale Supérieure, Paris, France); P. Hoyng (SRON, Utrecht, The Netherlands).

Models of the dynamo of Mars

U. Christensen and J. Wicht in collaboration with D. Breuer (DLR – Institut für Planetenforschung, Berlin, Germany).

NERC consortium: "SOLCLI: Solar Influence on Climate"

N. A. Krivova and S. K. Solanki in collaboration with Astrophysics Group (Imperial College London, UK).

New Generation Active Region Model

J. Thalmann, T. Wiegelmann, and T. Tadesse in collaboration with P. MacNeice, D. Spicer (NASA GSFC, Greenbelt, USA); P. Schuck (NRL, Washington, USA); K. Olson (Drexel University, Philadelphia, USA).

Nonlinear force-free coronal magnetic fields (NLFFF-consortium)

J. Thalmann, T. Wiegelmann, and T. Tadesse in collaboration with C. J. Schrijver (LMSAL, Palo Alto, USA).

Observations of comets

C. Snodgrass, C. Tubiana, H. Boehnhardt, and J.-B. Vincent in collaboration with K. Meech, H. Hsieh, J. Pittichová (Institute for Astronomy, Hawaii, USA); O. Hainaut (ESO, Garching, Germany); A. Fitzsimmons (Queen's University, Belfast, UK); S. Lowry, S. Duddy (University of Kent, Canterbury, UK); Y. Fernández, H. Campins (University of Central Florida, Orlando, USA); P. Weissman, J. Bauer (JPL, Pasadena, USA); M. A'Hearn, M. Kelley (University of Maryland, College Park, USA); J. Licandro (Instituto de Astrofísica de Canarias, Tenerife, Spain); C. Lisse, H. Weaver (Johns Hopkins University, Laurel, USA); W. Reach (SOFIA, Moffet Field, USA); O. Groussin, P. Lamy (Laboratoire d'Astrophysique de Marseille, Marseille, France); I. Toth (Konkoly Observatory, Budapest, Hungary); E. Jehin, J. Manfroid, D. Hutsemékers (Université de Liège, Liège, Belgium); T. Lister (Las Cumbres Observatory, Santa Barbara, USA); E. Mazzotta Epifani (INAF, Napoli, Italy); G. Paulo Tozzi (INAF Arcetri Observatory, Florence, Italy).

Observations of KBOs

C. Snodgrass in collaboration with B. Carry (ESAC, Madrid, Spain); O. Hainaut (ESO, Garching, Germany); C. Dumas, A. Alvarez-Candal (ESO, Santiago de Chile, Chile); P. Lacerda (Queen's University, Belfast, UK).

Physical and composition properties of shortperiodic and Oort Cloud comets

H. Boehnhardt and C. Tubiana in collaboration with S. Bagnulo (ESO, Santiago de Chile, Chile and Armagh Observatory, UK); L. Barrera (UMCE, Santiago de Chile); D. Harker (University of San Diego, USA); M. Kelley (Joint Astronomy Center, Hilo, USA); S. Kolokolova (University of Maryland, College Park, USA); L. Lara (IAA, Granada, Spain); M. Mumma, M. DiSanti, B. Bonev (NASA GSFC, Greenbelt, USA); D. Prialnik, E. Beer-Harari (Tel Aviv University, Israel); G. P. Tozzi (INAF Arcetri Observatory, Florence, Italy); D. Wooden (PI) (NASA Ames Res. Center, Moffett Fields, USA); C. Woodward (University of Minnesota, Minneapolis, USA).

Physics of Saturn's magnetosphere compared to Jupiter

N. Krupp in collaboration with W.H. Ip (Institute of Astronomy, National Central University Taiwan, Jhongli City, Taiwan); T. Krimigis (Applied Physics Laboratory, Johns Hopkins University, Laurel, USA); K.K. Khurana (UCLA, Los Angeles, USA).

Plasma dynamics in stellar atmospheres

J. Büchner in collaboration with U. Motschmann (Technische Universität Braunschweig, Germany).

PLATO (PLAnetary Transits and Oscillations of stars)

L. Gizon in collaboration with European consortium led by C. Catala (IAP, Paris, France).

PLATO (PLAnetary Transits and Oscillations of stars) ground data center assessment study

L. Gizon (coordinator), R. Burston, I. Pardonitz, H. Moradi, H. Schunker, and T. Stahn in collaboration with T. Appourchaux (IAS, Orsay, France); C. Catala, R. Samadi (Observatoire de Paris, Meudon, France); M. Deleuil (LAM, Marseille, France); N. Walton (Institute of Astronomy, University of Cambridge, UK); P. Giommi (ASDC-ASI, Italy); P. Bodin (CNES, Toulouse, France).

PROBA II – LYRA (Large Yield Radiometer)

U. Schühle in collaboration with J.-F. Hochédez (PI), A. BenMoussa, D. Berghmans, A. Theissen, V. Delouille, B. Nicula, L. Wauters, R. Van der Linden, A. Zhukov, F. Clette (Royal Observatory of Belgium, Brussels, Belgium); W. Schmutz, S. Koller, H. Roth, E. Rozanov, I. Rüedi, C. Wehrli (Physikalisch-Meteorologisches Observatorium Davos, Davos, Switzerland); K. Haenen, V. Mortet, Z. Remes, M. Nesládek, M. D'Olieslaeger (Institute for Materials Research, Diepenbeek, Belgium); Y. Stockman, J.-M. Defise, J.-P. Halain, P. Rochus (Centre Spatial de Liège, Liège, Belgium); D. Gillotay, D. Fussen, M. Dominique, F. Vanhellemont (Belgian Institute for Space Aeronomy, Brussels, Belgium); V. Slemzin, A. Mitrofanov (Lebedev Physical Institute, Moscow, Russia); D. McMullin (Naval Research Laboratory, Washington DC, USA); M. Kretzschmar (Istituto Fisica dello Spazio Interplanetario, Rome, Italy); R. Petersen, M. Nesládek, M. D'Olieslaeger (IMEC, Diepenbeek, Belgium); J. Roggen (IMEC, Louvain, Belgium); S. Koizumi (Advanced Materials Laboratory, National Institute for Materials Science, Tsukuba, Japan); H. Amano (Meijo University, Nagoya, Japan); A. Soltani (Institut d'Electronique, de Microélectronique et de Nanotechnologie, Villeneuve d'Ascq, France).

PROBA II – SWAP (Sun Watcher using APS Detectors)

U. Schühle in collaboration with D. Berghmans, J. F. Hochédez, B. Nicula, G. Lawrence, A. C. Katsiyannis, R. Van der Linden, A. Zhukov, F. Clette (Royal Observatory of Belgium, Brussels, Belgium); J. M. Defise (PI), J. H. Lecat, P. Rochus, E. Mazy, T. Thibert (Centre Spatial de Liège, Liège, Belgium); P. Nicolosi, M. G. Pelizzo (University of Padova, Italy); V. Slemzin (Lebedev Physical Institute, Moscow, Russia).

PROBA-3 – ASPIIC

W. Curdt and S.K. Solanki in collaboration with Ph. Lamy (Laboratoire d'Astrophysique de Marseille, France); K. Tsinganos (University of Athens, Greece)

Propagating waves in polar coronal holes as seen by SUMER & EIS

L. Teriaca and S. K. Solanki in collaboration with D. Banerjee (Indian Institute of Astrophysics, Bangalore, India); G. R. Gupta (Indian Institute of Science, Bangalore, India); S. Imada (National Astronomical Observatory of Japan, Tokyo, Japan); G. Stemborg (Interferometrics Inc., Herndon, USA).

PROTEUS

H. Böhnhardt and M. Hilchenbach in collaboration with Y. Langvin (Institute d'Astrophysique Spatiale, Paris, France); K. Meech (University of Hawaii, USA); J. Silén (Finish Meteorological Institute, Helsinki, Finland)

RAISE – Rapid Imaging Spectrograph Experiment

U. Schühle in collaboration with D. Hassler (PI), D. Slater, C. DeForest, S. McIntosh (Southwest Research Institute, San Antonio, USA); T. Ayres (University of Colorado, Boulder, USA); R. Thomas (NASA GSFC, Greenbelt, USA); H. Michaelis (Institut für Planetenforschung, DLR, Berlin, Germany).

Rapid time variations of the geomagnetic field

U. Christensen and J. Wicht in collaboration with V. Lesur (GeoForschungsZentrum, Potsdam, Germany).

Reconstruction of the solar cyclic variability over the Holocene

N.A. Krivova in collaboration with L.E.A. Vieira (Laboratoire de Physique et Chimie de l'Environnement et de l'Espace , Orleans, France).

Rosetta – CONSERT (Radio Tomography Project)

H. Boehnhardt in collaboration with Institut de Planétologie et d'Astrophysique de Grenoble (France).

Rosetta – COSAC (PHILAE)

H. Boehnhardt and F. Goesmann in collaboration with F. Raulin (LISA, Creteil Cedex, France); U. J. Meierhenrich (Université Nice-Sophia Antipolis, Nice, France); C. Szopa (LATMOS, Paris, France).

Rosetta – COSIMA

M. Hilchenbach (PI), H. Krüger, H. Boehnhardt, and H. Fischer in collaboration with K. Altweig (Physikalisches Institut, Universität Bern, Switzerland); B. C. Clark (Lockheed Martin Astronautics, Denver, USA); H. Cottin, F. Raulin (LISA, Creteil Cedex, France); G. Haerendel (MPI für extraterrestrische Physik, Garching, Germany); C. Engrand (Centre de Spectrométrie Nucléaire et de Spectrométrie de Masse, Orsay, France); R. Schulz (ESTEC, Noordwijk, The Netherlands); A. Glasmachers (Universität Wuppertal, Germany); E. Grün (MPI für Kernphysik, Heidelberg, Germany); H. Henkel, H. von Hoerner, A. Koch (von Hoerner und Sulger, Schwetzingen, Germany); K. Hornung (Universität der Bundeswehr, Neubiberg, Germany); E. K. Jessberger (Institut für Planetologie, Universität Münster, Germany); Y. Langein (Institut d'Astrophysique, Orsay, France); F. Rüdenauer (Institut für Physik, Seibersdorf, Austria); J. Rynö, J. Silén (Finnish Meteorological Institute, Helsinki, Finland); W. Steiger (ARC Seibersdorf Research GmbH, Seibersdorf, Austria); T. Stephan (Univ. of Chicago, USA); L. Thirkell, R. Thomas, C. Briois (Laboratoire de Phys. & Chim. de L'Environnement, Orléans, France); K. Torkar (Institut für Weltraumforschung, Graz, Austria); M. Trieloff (Mineralogisches Institut, Universität Heidelberg, Germany); K. Varmuza (Institut für Verfahrenstechnik, Umwelttechnik und Techn. Biowissenschaften, TU Wien, Austria); K. P. Wanczek (Institut für Anorganische und Physikalische Chemie, Universität Bremen, Germany); E. Zinner (Laboratory for Space Sciences, Washington University, St. Louis, MO, USA.)

Rosetta-DIM (Dust Impact Monitor)

H. Krüger (PI) and A. Loose in collaboration with Klaus J. Seidensticker (DLR, Institut für Planetenforschung, Berlin, Germany); Hans-Herbert Fischer (DLR, Köln, Germany); A. Hirn, I.

Apathy (MTA Centre for Energy Research, Budapest, Hungary); M. Sperl (DLR, Institut für Materialphysik im Weltraum, Köln, Germany); W. Arnold (Universität des Saarlands, Saarbrücken, and Universität Göttingen, Germany); Alberto Flandes (Instituto de Geofisica, UNAM, Coyoacán, Mexico).

Rosetta – MIRO (*Microwave Instrument for the Rosetta-Orbiter*)

P. Hartogh and C. Jarchow in collaboration with S. Gulkis, M. Allen, M. Frerking, M. Hofstadter, M. Janssen, T. Spilker (JPL, Pasadena, USA); D. Muhleman (Caltech, Pasadena, USA); G. Beaudin, D. Bockelee-Morvan, J. Crovisier, P. Encrenaz, T. Encrenaz, E. Lellouch (Observatoire de Paris, Meudon, France); D. Despois (Observatoire de Bordeaux, France); H. Rauer (DLR, Berlin, Germany); P. Schloerb (University of Massachusetts, Amherst, USA).

Rosetta – OSIRIS

H. Sierks, S. F. Hviid, R. Kramm, H. Boehnhardt, N. Oklay, C. Snodgrass, J.-B. Vincent, and C. Tubiana in collaboration with C. Barbieri, F. Angrilli, I. Bertini, V. da Deppo, S. Debei, M. de Cecco, F. Ferri, M. Lazzarin, S. Magrin, F. Marzani and G. Naletto (CISAS, University of Padova, Italy); P. Lamy, L. Jorda, O. Groussin (Laboratoire d’Astrophysique de Marseille, France); H. Rickmann, B. Davidsson (Uppsala Universitet, Sweden); R. Rodrigo, P. Gutierrez, L. M. Lara, J. de Leon, J. J. Lopez Moreno (Instituto de Astrofísica de Andalucía, Granada, Spain); D. Koschny, K.-P. Wenzel (ESTEC, Noordwijk, The Netherlands); M. F. A’Hearn (University of Maryland, College Park, MD, USA); L. Sabau (Instituto Nacional de Técnica Aersospacial, Torrejon de Ardoz, Spain); M. A. Barucci, F. Fornasier, C. Leyrat (Observatoire de Paris, Meudon, France); J.-L. Bertaux (Service d’Aéronomie du CNRS, Verrière-le-Buisson, France); M. Fulle (Osservatorio Astronomico di Trieste, Italy); H. Michalik (Institut für Datentechnik und Kommunikationsnetze, TU Braunschweig, Germany); W.-H. Ip (Institute of Space Science, National Central University, Chung Li, Taiwan); E. Kührt, J. Knollenberg (DLR-Institut für Planetenforschung, Berlin, Germany); A. Sanz (Universidad Politécnica de Madrid, Spain); N. Thomas (Physikalisches Institut, Universität Bern, Switzerland); G. Cremonese, R. Ragazzoni (INAF, Osservatorio Astronomico, Padova, Italy); M. Küppers, R. Moissl (ESAC, Madrid, Spain).

Rosetta – PHILAE (*Rosetta Lander*)

H. Boehnhardt, R. Roll, B. Chares, H. Fischer, O. Küchemann and W. Kühne in collaboration with S. Ulamec (DLR, Köln, Germany); J. P. Bibring (IAS, Paris, France); P. Gaudon (CNES, Toulouse, France).

Rosetta – PHILAE – ROMAP

M. Hilchenbach in collaboration with U. Auster (TU Braunschweig, Germany).

Rosetta – RTOF/ROSINA

U. Mall in collaboration with H. Balsiger (PI) (Universität Bern, Switzerland); BIRA (Brussels, Belgium); CESR (Toulouse, France); IPSL (Saint Maur, France); IDA (Braunschweig, Germany); University of Michigan (Ann Arbor, USA); Southwest Research Institute (San Antonio, USA); Universität Giessen (Germany).

SDO-based magnetic modeling of the solar corona

J. Thalmann and T. Wiegelmüller in collaboration with J. Todd Hoeksema, X. Sun (HEPL, Stanford University, USA).

Seismic Constraints on Solar Convection

S.H. Hanasoge in collaboration with T. L. Duvall (NASA GSFC, Greenbelt, USA).

SELENE2-SEIS

M. Bierwirth, R. Roll and U. Christensen in collaboration with N. Kobayashi, H. Shiraishi (JAXA Institute of Space and Astronautical Science, Tokio, Japan); P. Lognonné, S. de Raucourt (Institute de Physique du Globe de Paris, Paris, France); P. Zweifel, D. Mance (ETH Zürich, Switzerland); D. Mimoun (Institute Supérieur de l’Aéronautique et de l’Espace, Toulouse, France)

Sensitivity kernels for local helioseismology

L. Gizon and R. Burston in collaboration with A. C. Birch (CoRA, Boulder, USA).

Simulation of the kinetics of space plasmas

J. Büchner in collaboration with M. Palmroth, Lars Daldorff (Finnish Meteorological Institute, Helsinki, Finland).

Simulation of plasma turbulence and magnetic reconnection

J. Büchner in collaboration with M. Ashour-Abdalla (University of California, Los Angeles, USA).

SISI (Seismic Imaging of the Solar Interior, ERC Starting Grant)

L. Gizon, R. Burston, and H. Moradi in collaboration with R. Bogart, P. H. Scherrer (Stanford University, USA).

SOFIA–GREAT (German Receiver for Astronomy at THz frequencies)

P. Hartogh and C. Jarchow in collaboration with R. Guesten, K. Menten, P. v. d. Wal (MPI für Radioastronomie, Bonn, Germany); R. Schieder, J. Stutzki (Universität Köln, Germany); H.W. Hübers (DLR-Berlin, Germany); H. P. Röser (Institut für Raumfahrtssysteme, Universität Stuttgart, Germany).

SOHO – CELIAS (Charge, Element and Isotope Analysis System onboard SOHO)

M. Hilchenbach and R. Kallenbach in collaboration with P. Bochsler (PI), H. Balsiger, A. Bürgi, J. Fischer, P. Wurz, B. Klecker (Physikalisches Institut, Universität Bern, Switzerland); D. Hovestadt, B. Klecker, P. Laeverenz, M. Scholer (MPI für Extraterrestrische Physik, Garching, Germany); F. M. Ipavich, M. A. Coplan, G. Gloeckler, S. E. Lasley, J. A. Paquette (University of Maryland, College Park, USA); R. Wimmer-Schweingruber, Karin Bamert (Universität Kiel, Germany); J. Geiss (International Space Science Institute, Bern, Switzerland); F. Gliem, K.-U. Reiche (Institut für Datentechnik und Kommunikationsnetze, TU Braunschweig, Germany); D. L. Judge, H. S. Ogawa (Space Science Center, University of Southern California, Los Angeles, USA); G. G. Managadze, M. I. Verigin (Institute for Space Physics, Moscow, Russia); A. B. Galvin, H. Kucharek, M. A. Lee, Y. Litvinenko, E. Möbius (EOS, University of New Hampshire, Durham, USA); M. Neugebauer (Jet Propulsion Laboratory, Pasadena, USA); K. C. Hsieh (University of Arizona, Tucson, USA); D. McMullin (Naval Research Laboratory, Washington, USA); A. Czechowski (Space Research Center, Polish Academy of Sciences, Warsaw, Poland).

SOHO – SUMER (Solar and Heliospheric Observatory – Solar Ultraviolet Measurements of Emitted Radiation)

W. Curdt, U. Schühle, S. K. Solanki, L. Teriaca, H. Peter and K. Wilhelm in collaboration with E. Landi, U. Feldman, G. A. Doschek, J. T. Mariska (Naval Research Laboratory, Washington, USA); P. Lemaire, A. H. Gabriel, J.-C. Vial (Institut d’Astrophysique Spatiale, Orsay, France); A. I. Poland (NASA GSFC, Greenbelt, USA); J. Hollandt (PTB, Berlin, Germany); O. Siegmund (SSL, University of California, Berkeley, USA); D. Hassler (SWRI, Boulder, USA); P. G. Judge (HAO, Boulder, USA); N. Brynildsen, M. Carlsson, P. Maltby, O. Kjeldseth-Moe (Institute of Theoretical Astrophysics, University of Oslo, Norway); P. Brekke (ESA/NASA GSFC, Greenbelt, USA); H. P. Warren (Harvard-Smithsonian Center for Astrophysics, Cambridge, USA); B. N. Dwivedi (DAP, Varanasi, India); C.-Y. Tu (DG, Beijing, China); J. G. Doyle (Armagh Observatory, UK); P. Heinzel (Astronomical Institute, Czech Academy of Science, Ondrejov, Czech Republic); M.C.E. Huber, A. Pauluhn (Paul Scherrer Institut, Villigen, Switzerland).

SOLAIRE (Solar Atmospheric and Interplanetary Research) - Research Training Network

E. Marsch, J. Büchner, and F. Rubio da Costa in collaboration with F. Moreno-Insertis (Instituto de Astrofísica de Canarias, Tenerife, Spain); A. Hood (University of St Andrews, UK); S. Poedts (Katholieke Universiteit Leuven, Belgium); A. Nordlund (Niels Bohr Institute, University of Copenhagen, Denmark); V. Hansteen (Institute of Theoretical Astrophysics, University of Oslo, Norway); G. Aulanier (Observatoire de Paris, Meudon, France); L. Fletcher (University of Glasgow, UK); F. Zuccarello (Università di Catania, Italy); Ch. Keller (Utrecht University, The Netherlands); K.

Petrovay (Eötvös University, Budapest, Hungary); A. Milne (Fluid Gravity Engineering Ltd., St Andrews, UK)

Solar coronal numerical simulation results comparison with flare magnetic field observations

J. Büchner in collaboration with H. Zhang, X. Li, S. Yang (Chinese Academy of Sciences, Beijing, China).

Solar-C (Plan A) Science Definition

L. Gizon in collaboration with T. Sekii (NOAJ, Tokyo, Japan) and others.

Solar-cycle variation of rotation and meridional circulation

L. Gizon in collaboration with M. Rempel (HAO, Boulder, USA); I. González Hernández (NSO, Tucson, USA).

Solar Dynamics Observatory

L. Gizon and S. K. Solanki in collaboration with P. H. Scherrer, J. Schou (Stanford University, USA); S. Tomczyk (High Altitude Observatory, Boulder, USA); A. M. Title (Lockheed-Martin Solar and Astrophysics Laboratory, Palo Alto, USA).

Solar Dynamics Observatory: German Data Center (DLR)

L. Gizon, R. Burston, I. Pardowitz, H. Schunker, H. Peter and S. K. Solanki in collaboration with M. Roth (Kiepenheuer-Institut für Sonnenphysik, Freiburg, Germany); G. Mann (Astrophysikalisches Institut Potsdam, Germany).

Solar dynamo

D. Schmitt, R. Cameron, and M. Schuessler in collaboration with J. Jiang (National Astronomical Observatories, Beijing, China); E. Isik (Istanbul Kultur University, Istanbul, Turkey).

Solar flares

T. Wiegemann in collaboration with J. Jing, H. Wang (New Jersey Institute of Technology, Newark, USA).

Solar infrared spectropolarimetry

A. Lagg and S. K. Solanki in collaboration with M. Collados (Instituto de Astrofísica de Canarias, Tenerife, Spain).

Solar irradiance during the satellite era

N. Krivova and S.K. Solanki in collaboration with Y.C. Unruh, W. Ball (Imperial College, London, UK); W. Schmutz (PMOD WRC, Davos, Switzerland).

Solar Orbiter: EUI

U. Schühle, W. Curdt, L. Teriaca, S. K. Solanki and J. Büchner in collaboration with T. Appourchaux, J.-C. Vial, F. Auchere (Institut d'Astrophysique Spatiale, Paris, France); P. Rochus, J. M. Defise (Centre Spatial de Liège, Liège, Belgium); J.-F. Hochedez (PI), A. BenMoussa (Royal Observatory of Belgium, Brussels, Belgium); L. Harra, J. Sun, D. Williams (Mullard Space Science Laboratories, London, UK).

Solar Orbiter: METIS (Multi Element Telescope for Imaging and Spectroscopy instrument)

L. Teriaca, U. Schühle and S. K. Solanki in collaboration with E. Antonucci (INAF Osservatorio Astronomico di Torino, Turin, Italy); N. Afram, Y. Unruh (Imperial College, London, UK); J. Harder (University of Colorado, Boulder, USA); T. Wenzler (ETH Zürich, Switzerland).

Solar Orbiter: PHI

S. K. Solanki, A. Feller, A. Gandorfer, L. Gizon, J. Hirzberger, A. Lagg, U. Schühle, and J. Woch in collaboration with V. Martinez Pillet (Instituto de Astrofísica de Canarias, La Laguna, Spain); T. Appourchaux (Institut d'Astrophysique Spatiale, Paris, France); M. Sigwarth (Kiepenheuer-Institut für Sonnenphysik, Freiburg, Germany); G. Scharmer (Institute for Solar Physics, Stockholm, Sweden); M. Carlsson (Institute of Theoretical Astrophysics, University of Oslo, Norway).

Solar Orbiter: SPICE

W. Curdt, U. Schühle, H. Peter and L. Teriaca in collaboration with D. Hassler, C. DeForest, D. Slater (Southwest Research Institute, San Antonio, USA); J. Davila, S.K. Antiochos, T. Kucera, R. Thomas (NASA GSFC, Washington, USA); H. P. Warren, J. Mariska (NRL, Washington, USA); K. Schrijver (LMSL, Palo Alto, USA); S. Habbal, I. Roussev (University of Hawaii, USA); T. Zurbuchen (University of Michigan, Ann Arbor, USA); D. Longcope (Montana State University, Bozeman, USA); T. Appourchaux, Buchlin, F. Auchere, J.-C. Vial (IAS, Paris, France); R. Harrison, P. Young (RAL, Didcot, UK); S. Mathews (MSSL, London, UK); M. Carlsson, V. Hansteen (Institute of Theoretical Astrophysics, University of Oslo, Norway).

Solar StereoscopY

B. Inhester in collaboration with ISSI (Bern, Switzerland); T. Dudoc deWitt (CNRS, Orleans, France); A. Vouridas (NRL, Washington, USA); J.-F. Hochedez (ROB, Brussels, Belgium); A. Llebaria (LAS, Marseille, France); J. P. Wuelser (LMSAL, Palo Alto, USA); F. Auchere (IAS, Orsay, France).

Solis

J. Thalmann in collaboration with N. E. Raouafi (NSO, Tucson, USA); A. Pietarila (NSO, Tucson, USA).

Sources of the solar wind

E. Marsch in collaboration with C.-Y. Tu (Peking University, Beijing, China).

Spectroscopy of asteroids

C. Snodgrass, C. Tubiana, H. Boehnhardt and J.-B. Vincent in collaboration with S. Protopapa (University of Maryland, College Park, USA); H. Hsieh (Institute for Astronomy, Hawaii, USA); P. Vernazza (ESO, Garching, Germany); P. Vernazza, R. Michelsen, H. Haack (University of Copenhagen, Denmark); A. Fitzsimmons (Queen's University, Belfast, UK); I. Williams (Queen Mary University, London, UK).

STEREO – IMPACT/SIT (Suprathermal Ion Telescope)

R. Bučík and U. Mall in collaboration with J. Luhmann (University of California, Berkeley, USA); V. Bothmer (Universität Göttingen, Germany) and members of the following institutes: NASA GSFC (Greenbelt, USA); NASA JPL (Pasadena, USA); California Institute of Technology (Pasadena, USA); Los Alamos National Lab (Los Alamos, USA); DESPA, Observatoire de Paris (Meudon, France); University of Michigan (Ann Arbor, USA); University of Colorado (Boulder, USA); Universität Kiel (Germany); KFKI Research Institute for Particle and Nuclear Physics (Budapest, Hungary); Science Applications International Corporation (San Diego, USA); Centre d'Etude Spatiale des Rayonnements/CRNS (Toulouse, France); ESTEC (Noordwijk, The Netherlands); University of Maryland (College Park, USA); Space Environment Centre, NOAA (Boulder, USA).

Structure of the solar chromosphere

S. K. Solanki and M. Loukitcheva in collaboration with S. White (University of Maryland, Greenbelt, USA).

Submm ground-based observations of the Venusian atmosphere

M. Rengel and P. Hartogh in collaboration with H. Sagawa (National Institute of Information and Communications Technology, Tokyo, Japan); R. Güsten (MPI for Radioastronomy, Bonn, Germany).

Submillimeter-Heterodyne Characterization of comets with ground-based telescopes

P. Hartogh, M. de Val-Borro, C. Jarchow, and M. Rengel in collaboration with G. Villanueva, L. Paganini (NASA GSFC, Greenbelt, USA); N. Biver, D. Bockele-Morvan, J. Crovisier (LESIA, Observatoire de Paris, Meudon, France); M. Drahus (University of California, Los Angeles, USA).

SUNRISE

S. K. Solanki, P. Barthol, A. Feller, A. Gandorfer, J. Hirzberger, A. Lagg, T. Riethmüller and F. Rubio da Costa in collaboration with V. Martinez-Pillet (Instituto de Astrofísica de Canarias, Tenerife, Spain), W. Schmidt (Kiepenheuer-Institut für Sonnenphysik, Freiburg, Germany), B.W.

Lites (High Altitude Observatory, NCAR, Boulder, USA); A.M. Title (Lockheed Martin Solar and Astrophysical Lab, Palo Alto, USA).

Sunspots

A. Lagg, M. van Noort, S. Tiwari and S. K. Solanki in collaboration with V. Martínez Pillet (Instituto de Astrofísica de Canarias, Tenerife, Spain); B. Lites (High Altitude Observatory, Boulder, USA); S. K. Mathew (Udaipur Solar Observatory, India).

Surface exploration of Kuiper Belt Objects and Cometary Nuclei

H. Boehnhardt (PI) in collaboration with S. Bagnulo (Armagh Observatory, UK); A. Barucci (Observatory Paris, Meudon, France); D. Cruikshank (NASA Ames Research Center, Moffett Field, USA); W. Grundy (Lowell Observatory, Flagstaff, USA); T. Herbst (MPI für Astronomie, Heidelberg, Germany); K. Muinonen (University Helsinki, Finland); C. Olkin (SWRI, Boulder, USA); G. P. Tozzi (INAF Arcetri Observatory, Florence, Italy).

Surface magnetic field effects in local helioseismology

H. Schunker in collaboration with D. C. Braun (CoRA, Boulder, USA); P. S. Cally (Monash University, Victoria, Australia).

SWA for Solar Orbiter (Solar Wind Analyser)

E. Marsch in collaboration with C. Owen (PI) (Mullard Space Science Laboratory, Dorking, UK).

The intensity oscillations in the chromospheric emissions

M. Loukitcheva in collaboration with S. White (University of Maryland, College Park, USA).

TNOs are cool

H. Boehnhardt and M. Rengel in collaboration with T. Mueller (MPE, Garching, Germany); E. Lellouch, A. Barucci, J. Crovisier, A. Delsanti, A. Dorresoundiram, S. Fornasier, D. Hestroffer (Observatoire de Paris, Meudon, France); J. Stansberry, M. Mueller, D. Trilling (Northern Arizona University, Flagstaff, USA); E. Dotto (INAF Osservatorio Astronomico di Roma, Rome, Italy); R. Duffard, P. Gutierrez, L. Lara, R. Moreno, J.-L. Ortiz, P. Sanz, A. Thirosin (IAA, Granada, Spain); O. Groussin (LAM, Marseille, France); O. Hainaut (ESO, Garching, Germany); A. Harris (DLR, Berlin, Germany); J. Horner (Open University, Milton Keynes, UK); D. Jewitt, P. Lacerda (University of Hawaii, Honolulu, USA); M. Kidger (ESAC, Villafranca, Spain); C. Kiss (Konkoly Observatory, Budapest, Hungary); T. Lim, B. Swinyard (RAL, Didcot, UK); N. Thomas (Universität Bern, Switzerland).

Ulysses – DUST

H. Krüger (PI) in collaboration with N. Altobelli, C. Polanskey (Jet Propulsion Laboratory, Pasadena, USA); B. Anweiler, D. Linkert, G. Linkert, R. Srama (MPI für Kernphysik, Heidelberg, Germany); E. Grün, R. Srama (MPI für Kernphysik, Heidelberg and Hawaii Institute of Geophysics and Planetology, Honolulu, USA); S. F. Dermott, B. A. Gustafson (University of Florida, Gainesville, USA); A. Flandes (Instituto de Geofísica, UNAM, Coyoacán, Mexico); A. L. Graps (INAF-Istituto di Fisica dello Spazio Interplanetario, Rome, Italy); D. P. Hamilton (University of Maryland, College Park, USA); M. S. Hanner (Jet Propulsion Laboratory, Pasadena, USA); M. Horany (Laboratory for Atmospheric and Space Physics, University of Colorado, Boulder, USA); M. Landgraf (ESA/ESOC, Darmstadt, Germany); B. A. Lindblad (Lund Observatory, Lund, Sweden); I. Mann (Institut für Planetologie, Universität Münster, Germany); J.A.M. McDonnell (Planetary and Space Science Research Institute, Milton Keynes, UK); G. E. Morfill (MPI für Extraterrestrische Physik, Garching, Germany); G. Schwehm (ESTEC, Noordwijk, The Netherlands).

Ulysses – SWICS (Solar Wind Ion Composition Spectrometer)

J. Woch and M. Fränz in collaboration with L. Rodriguez (Royal Observatory of Belgium, Brussels, Belgium); R. von Steiger (ISSI, Bern, Switzerland).

Venus Express – ASPERA-4 (Analyzer of Space Plasmas and EneRgetic Atoms)

M. Fränz and Y. Wei in collaboration with S. Barabash (PI), R. Lundin (IRF, Kiruna, Sweden); D. Winningham, R. Frahm (SWRI, San Antonio, USA); P. Wurz (Universität Bern, Switzerland); A.

Coates (MSSL, Dorking, UK); M. Grande (RAL, Didcot, UK); C. C. Curtis (University of Arizona, Tucson, USA); J. A. Sauvaud, A. Fedorov (CESR, Toulouse, France); E. Kallio (FMI, Helsinki, Finland); S. Orsini (IFSI, Rome, Italy).

Venus Express – VMC (Venus Monitoring Camera)

W.J. Markiewicz, E. Shalygin and O. Shalygina in collaboration with H. Michalik, B. Fiethe, C. Dierker, B. Osterloh (Institut für Datentechnik und Kommunikationsnetze, TU Braunschweig, Germany); R. Jaumann, Th. Behnke, Th. Roatsch, K.-D. Matz, F. Scholten (DLR - Institut für Planetenforschung, Berlin, Germany); N. Ignatiev, D. Belyaev, I. Khatuntsev (Space Research Institute, Moscow, Russia); A. Basilevsky (Vernadsky Institute for Analytical Chemistry and Geochemistry, Moscow, Russia); S. Limaye (University of Wisconsin, Madison, USA).

VESPER – Venus Atmosphere Chemistry and Dynamics Orbiter

P. Hartogh in collaboration with G. Chin (NASA GSFC, Greenbelt, USA); M. Allen (JPL, Pasadena, USA).

WASPAM / CAWSSES

P. Hartogh and C. Jarchow in collaboration with G. Hansen (Norsk institutt for luftforskning, Tromsö, Norway); U. P. Hoppe (Forsvarets forskningsinstitutt, Kjeller, Norway); M. Gausa (ALOMAR Observatory, Andenes, Norway); U. von Zahn, F. J. Lübken, U. Berger, G. Sonnemann (IAP Kühlungsborn, Germany); G. Nedoluha, M. Stevens (NRL, Washington DC, USA); P. Espy (British Antarctic Survey, Cambridge, UK); Y. Kasai (National Institute of Information and Communications Technology, Tokyo, Japan).

Waves in the solar atmosphere

L. Teriaca, S.K. Solanki, and G. Gupta in collaboration with D. Banerjee, B. Ravindra (Indian Institute of Astrophysics, Bangalore, India); G. Stemborg (Interferometrics Inc, Hemdon, USA).

Wave propagation in inclined magnetic fields

H. Schunker in collaboration with D. C. Braun (CoRA, Boulder, USA); P. Cally (Monash University, Australia).

WFI Archive project

C. Snodgrass in collaboration with B. Conn (Max-Planck-Institut für Astronomie, Heidelberg, Germany).

YORP effect on asteroids

C. Snodgrass in collaboration with S. Lowry (PI), S. Duddy (University of Kent, Canterbury, UK); A. Fitzsimmons (Queen's University, Belfast, UK); S. Green, B. Rozitis (Open University, Milton Keynes, UK); P. Weissman, S. Wolters, E. Rosenberg, M. Hicks (JPL, Pasadena, USA).

2. Vorschläge und Anträge / *Proposals*

2.1 Projektvorschläge / *Project proposals*

"Astrophysical Flow Instabilities and Turbulence" - Collaborative Research Center

Submitted to DFG.

U. R. Christensen with S. Dreizler (Universität Göttingen) et al.

CHOPPER

Submitted to DLR.

U. Mall.

Collaborative Research Center (SFB 963) "Astrophysical Flow Instabilities and Turbulence"

Submitted to DFG; selected.

U. Christensen, L. Gizon, M. Schüssler and J. Büchner with Stefan Dreizler (Speaker, Universität Göttingen) and collaborators from the Göttingen Research Campus and TU Braunschweig.

MarcoPol-R - Near Earth Asteroid Return Mission

Submitted to ESA.

H. Boehnhardt with M.A. Barucci, P. Michel, P.A. Bland, J.R. Brucato, E. Dotto, I.A. Franchi, S.F. Green, L.M. Lara, B. Marty, A. Cheng, L. Benner, R.P. Binzel, A. Rivkin, M. Zolensky.

Microstructure, Chemistry, and Mineralogy of Martian Soils. Search for Alteration Phases.

Submitted to NASA

W. Goetz and S. F. Hviid.

MPRCS - Study of the Marco-Polo-R Camera System for the Visible Wavelength Range

Submitted to ESA.

H. Boehnhardt, A. Nathues, and H. Sierks with L.M. Lara, A.M. Harri, I. Karachevtseva, J. de Leon, H. Michalik, J. Oberst, R. Rodrigo, J. Silen.

PLATO Science Implementation Plan (SIP)

Submitted to the ESA Call for the M1/M2 missions; not selected.

L. Gizon and members of his department with Claude Catala (Observatoire de Paris, Meudon, France) and the PLATO Mission Consortium.

SAFARI - Solar Activity Far Side Investigation

Submitted to NASA (2011 EXPLORER Proposal); not selected.

L. Gizon with Marco Velli (PI, JPL, Pasadena, USA) and others.

SLEO

Submitted to DLR.

U. Mall with H. Hoffmann, R. Jaumann, H. Hiesinger, F. Claassen, T. Spohn, J. Helbert, N. Kappelmann, K. Werner, R. Wimmer-Schweingruber, R. Srama, J. Oberst, J. Flohrer, M. Werner, G. Neukum, S. van Gasselt, N. Schmitz, K. Eichentopf, T. Knigge, U. Kummer, M. Langemann, R. Haarmann, H. Müller.

Solar-C Plan A

Submitted to ISAS/JAXA; not selected.

L. Gizon with T. Sekii (NOAJ, Tokyo, Japan) and others.

SolarNET - High-Resolution Solar Physics Network

Submitted to EU-FP7; selected.

A. Lagg, M. van Noort, A. Feller, L. Gizon and S. K. Solanki with M. Collados Vera (IAC, La Laguna, Spain) et al.

SOLID - First European comprehensive SOLar Irradiance Data exploitation

Submitted to EU-FP7; selected.

N. A. Krivova, S.K. Solanki, and M. Dasi with W. Schmutz, M. Haberreiter, Th. Dudok de Wit, Y.C. Unruh, I. Ermolli, M. Kretzschmar, R. Qahwaji, C. Verbeeck, M. Weber, G. Del-Zanna, C. Tourpali

Sources of Plasma in Planetary Magnetospheres

Submitted to ISSI.

E. Kronberg.

Space Applications of Nano-tube Devices

Submitted to ERC.

M. Fraenz with F. Leblanc (LATMOS, Paris, France); U. Vohrer (Fraunhofer-IGB, Stuttgart, Germany).

SPACEINN - Exploitation of Space Data for Innovative Helio- and Asteroseismology

Submitted to EU-FP7; selected.

L. Gizon with O. von der Luehe (KIS, Freiburg, Germany) and Instituto de Astrofísica de Canarias (Tenerife, Spain), CEA (France), INAF (Italy), KU Leuven (Belgium), Observatoire de Paris (Meudon, France), Centro de Astrofísica da Universidade do Porto (Portugal), University Birmingham (UK), University Aarhus (Denmark).

Structure and evolution of an active region on the Sun

Submitted to PRACE.

H. Peter, P. Bourdin, and S. Bingert.

THEA - Training in HElio- and Asteroseismology

Submitted to EU-FP7; not selected

L. Gizon with M. Cunha (Coordinator, Centro de Astrofísica da Universidade do Porto, Portugal), J. Christensen-Dalsgaard (Aarhus Universitet, Denmark), O. v. d. Luehe (KIS, Freiburg, Germany), C. Aerts (KU Leuven, Belgium), T. Appourchaux (Institut d'Astrophysique Spatiale, Paris, France), P. Palle (Instituto de Astrofísica de Canarias, Teneriffe, Spain), G. Houdek (Universität Wien, Austria), J. Daszynska-Daszkiewicz (Uniwersytet Wrocławski, Poland), U. Johann (EADS-Astrium GmbH), and two Associated Partners.

Using SDO/HMI Data to Investigate the Energization of the Coronal Magnetic Field

Submitted to NASA LWS; selected

L. Gizon with G. Barnes (PI, NWRA/CoRA, Boulder, USA), A. Birch, K.D. Leka (NWRA), M. Wheatland (University of Sydney), Peter Schuck (NASA).

2.2 Anträge auf Beobachtungszeit / *Observing time proposals****Change in spin rate of asteroid Cuyo?***

MPIA (DDT)

C. Snodgrass with S. Lowry, S. Duddy.

Direct Detections of the Asteroidal YORP Effect

CAHA (Calar Alto Observatory).

C. Snodgrass with S. Lowry, S. Duddy, A. Fitzsimmons.

HCN Submm Remote Sensing of the Titan Atmosphere in support of a Guaranteed Key Program on Herschel

ESO.

M. Rengel and P. Hartogh with H. Sagawa (NICT, Tokyo, Japan).

Millimeter observations of a sunspot chromosphere

ALMA.

M. Lukitcheva and S. K. Solanki with S. White (University of Maryland, Greenbelt, USA).

Mineralogy and the distribution of water ice in the outer main asteroid belt

ESO.

C. Snodgrass, V. Reddy, C. Tubiana, and H. Boehnhardt with S. Protopapa, P. Vernazza, B. Carry, H. Hsieh.

Physical Properties of two special trans-Neptunian Objects and a retrograde Centaur

ALMA.

M. Rengel, P. Hartogh and M. de Val Borro with E. Vilenius, T. Mueller (MPE, Garching, Germany); P. Santos-Sanz (Observatoire de Paris, France); M. Mommert (DLR – Institut für Planetenforschung, Berlin, Germany); K. Csaba, A. Pal (Konkoli Observatory, Hungary).

Probing the Enceladus torus with Herschel

Herschel Space Observatory.

M. Rengel, C. Jarchow, and P. Hartogh with E. Lellouch, R. Moreno, D. Bockelée-Morvan, N. Biver, J. Crovisier (Observatoire de Paris, France); T. Cassidy (LASP, University of Colorado, USA); T. Cavalié (Observatoire de Bordeaux, France).

The nucleus of 17P/Holmes, source of a large unexplained outburst.

ESO.

C. Snodgrass with A. Fitzsimmons, H. Hsieh, S. Lowry.

The shapes and densities of asteroids

LCOGT (Las Cumbres Observatory Global Telescope).

C. Snodgrass with B. Carry, T. Lister.

The Solar phase functions of six comet nuclei

ESO.

C. Snodgrass and C. Tubiana with A. Fitzsimmons, S. Lowry.

The water D/H ratio in a TOO long-period comet

Herschel Space Observatory.

M. Rengel, M. de Val Borro, and P. Hartogh with R. Moreno, D. Bockelée-Morvan, N. Biver, J. Crovisier (Observatoire de Paris, France); A. Morbidelli (Observatoire de Nice, France), T. Bergin (University of Michigan, Ann Arbor, USA), G. A. Blake, M. Emprechtinger, D. Lis (Caltech, Pasadena, USA), M. Kueppers (ESAC, Madrid, Spain) S. Szutowicz (Space Research Center, Warsaw, Poland).

3. Publikationen / Publications

3.1 Referierte Publikationen / Refereed publications

(fett gedruckt: zu MPS gehörig /bold: affiliated to MPS)

Afram, N., Y. C. Unruh, S. K. Solanki, M. Schüssler, A. Lagg, and A. Vögler, Intensity contrast from MHD simulations and HINODE observations, *Astron. & Astrophys.*, 526, A120, doi:10.1051/0004-6361/201015582, 2011.

A'Hearn, M. F., M. J. S. Belton, W. A. Delamere, L. M. Feaga, D. Hampton, J. Kissel, K. P. Klaasen, L. A. McFadden, K. J. Meech, H. J. Melosh, P. H. Schultz, J. M. Sunshine, P. C. Thomas, J. Veverka, D. D. Wellnitz, D. K. Yeomans, S. Besse, D. Bodewits, T. J. Bowling, B. T. Carcich, S. M. Collins, T. L. Farnham, O. Groussin, B. Hermaryn, M. S. Kelley, J.-Y. Li, D. J. Lindler, C. M. Lisse, S. A. McLaughlin, F. Merlin, S. Protopapa, J. E. Richardson, and J. L. Williams, EPOXI at Comet Hartley 2, *Science*, 332(6036), 1396–1400, doi:10.1126/science.1204054, 2011.

Amit, H., U. R. Christensen, and B. Langlais, The influence of degree-1 mantle heterogeneity on the past dynamo of Mars, *Phys. Earth Planet. Inter.*, 189(1-2), 63–79, doi:10.1016/j.pepi.2011.07.008, 2011.

Anekallu, C. R., M. Palmroth, T. I. Pulkkinen, S. Haaland, E. A. Lucek, and I. S. Dandouras, Energy conversion at the Earth's magnetopause using single and multi-spacecraft methods, *J. Geophys. Res.*, 116, A11204, doi:10.1029/2011JA016783, 2011.

Angsmann, A., M. Fränz, E. Dubinin, J. Woch, S. Barabash, T. Zhang, and U. Motschmann, Magnetic states of the ionosphere of Venus observed by Venus Express, *Planet. Space Sci.*, 59, 327–337, doi:10.1016/j.pss.2010.12.004, 2011.

Anusha, L. S., K. N. Nagendra, M. Bianda, J. O. Stenflo, R. Holzreuter, M. Sampoorna, and H. Frisch, Analysis of the Forward-Scattering Hanle Effect in the Ca i 4227 Å Line, *Astrophys. J.*, 737, 95, doi:10.1088/0004-637X/737/2/95, 2011.

Araneda, J. A., H. Astudillo, and E. Marsch, Intercations of Alfvén-Cyclotron Waves with Ions in the Solar Wind, *Space Sci. Rev.*, doi:10.1007/s11214-011-9773-0, 2011.

Arik, M., S. Aune, K. Barth, A. Belov, S. Borghi, H. Bräuninger, G. Cantator, J. M. Carmona, S. A. Cetin, J. I. Collar, T. Dafni, M. Davenport, C. Eleftheriadis, N. Elias, C. Ezer, G. Fanourakis, E. Ferrer-Ribas, P. Friedrich, J. Galán, J. A. Garcíá, A. Gardikiotis, E. N. Gazis, T. Geralis, I. Giomataris, S. Gninenko, H. Gómez, E. Gruber, T. Guthörl, R. Hartmann, F. Haug, M. D. Hasinoff, D. H. H. Hoffmann, F. J. Iguaz, I. G. Irastorza, J. Jacoby, K. Jakovčić, M. Karuza, K. Königsmann, R. Kotthaus, M. Krčmar, M. Kuster, B. Lakić, J. M. Laurent, A. Liolios, A. Ljubičić, V. Lozza, G. Lutz, G. Luzón, J. Morales, T. Niinikoski, A. Nordt, T. Papaevangelou, M. J. Pivovaroff, G. Raffelt, T. Rashba, H. Riege, A. Rodríguez, M. Rosu, J. Ruz, I. Savvidis, P. S. Silva, S. K. Solanki, L. Stewart, A. Tomás, M. Tsagri, K. van Bibber, T. Vafeiadis, J. A. Villar, J. K. Vogel, S. C. Yıldız, and K. Zioutas, Search for Sub-eV Mass Solar Axions by the CERN Axion Solar Telescope with 3 He Buffer Gas, *Phys. Rev. Lett.*, 107(5), 261302, doi:10.1103/PhysRevLett.107.261302, 2011.

Arridge, C. S., N. André, H. J. McAndrews, E. J. Bunce, M. H. Burger, K. C. Hansen, H.-W. Hsu, R. E. Johnson, G. H. Jones, S. Kempf, K. K. Khurana, N. Krupp, W. S. Kurth, J. S. Leisner, C. Paranicas, E. Roussos, C. T. Russell, P. Schippers, E. C. Sittler, H. T. Smith, M. F. Thomsen, and M. K. Dougherty, Mapping Magnetospheric Equatorial Regions at Saturn from Cassini Prime Mission Observations, *Space Sci. Rev.*, 164, 1–83, doi:10.1007/s11214-011-9850-4, 2011.

Bagnulo, S., I. Belskaya, H. Boehnhardt, L. Kolokolova, K. Muinonen, M. Sterzik, and G.-P. Tozzi, Polarimetry of small bodies of the solar system with large telescopes, *J. Quant. Spectrosc. Radiat. Transf.*, 112(13), 2059–2067, doi:10.1016/j.jqsrt.2011.05.004, 2011.

- Ball, W. T., Y. C. Unruh, N. A. Krivova, S. K. Solanki, and J. W. Harder, Solar Irradiance Variability: a Six-Year Comparison between SORCE Observations and the SATIRE model, Astron. & Astrophys., 530, A71, doi:10.1051/0004-6361/201016189, 2011.*
- Ballot, J., L. Gizon, R. Samadi, G. Vauclair, O. Benomar, H. Bruntt, B. Mosser, T. Stahn, G. A. Verner, T. L. Campante, R. A. García, S. Mathur, D. Salabert, P. Gaulme, C. Régulo, I. W. Roxburgh, T. Appourchaux, F. Baudin, C. Catala, W. J. Chaplin, S. Deheuvels, E. Michel, M. Bazot, O. Creevey, N. Dolez, Y. Elsworth, K. H. Sato, S. Vauclair, M. Auvergne, and A. Baglin, Accurate p-mode measurements of the G0V metal-rich CoRoT target HD 52265, Astron. & Astrophys., 530, A97, doi:10.1051/0004-6361/201116547, 2011.*
- Balthasar, H., N. Bello González, M. Collados, C. Denker, A. Feller, A. Hofmann, A. Lagg, L. Nagaraju, K. G. Puschmann, D. Soltau, and R. Volkmer, Polarimetry with GREGOR, in: Solar Polarization 6 (edited by J. R. Kuhn, D. M. Harrington, H. Lin, S. V. Berdyugina, J. Trujillo-Bueno, S. L. Keil, and T. Rimmele), vol. 437 of Astronomical Society of the Pacific Conference Series, pp. 351–358, 2011.*
- Banerjee, D., G. R. Gupta, L. Teriaca, Propagating MHD Waves in Coronal Holes, Space Sci. Rev., 158(2-4), 267-288, doi: 10.1007/s11214-010-9698-z, 2011.*
- Barranco, J., O. G. Miranda, C. A. Moura, T. I. Rashba, and F. Rossi-Torres, Confusing the extragalactic neutrino flux limit with a neutrino propagation limit, J. Cosmol. Astropart. Phys., 188(10), 007, doi:10.1088/1475-7516/2011/10/007, 2011.*
- Bartá, M., J. Büchner, M. Karlický, and J. Skála, Spontaneous current-layer fragmentation and cascading reconnection in solar flares: I. Model and analysis, Astrophys. J., 737, 24, doi:10.1088/0004-637X/737/1/24, 2011.*
- Bárta, M., J. Büchner, M. Karlický, and P. Kotrè, Spontaneous Current-layer Fragmentation and Cascading Reconnection in Solar Flares. II. Relation to Observations, Astrophys. J., 730, 47, doi:10.1088/0004-637X/730/1/47, 2011.*
- Barthol, P., A. Gandorfer, S. K. Solanki, M. Schüssler, B. Chares, W. Curdt, W. Deutsch, A. Feller, D. Germerott, B. Grauf, K. Heerlein, J. Hirzberger, M. Kolleck, R. Meller, R. Müller, T. L. Riethmüller, G. Tomasch, M. Knölker, B. W. Lites, G. Card, D. Elmore, J. Fox, A. Lecinski, P. Nelson, R. Summers, A. Watt, V. Martínez Pillet, J. A. Bonet, W. Schmidt, T. Berkefeld, A. M. Title, V. Domingo, J. L. Gasent Blesa, J. C. Del Toro Iniesta, A. López Jiménez, A. Álvarez-Herrero, L. Sabau-Graziati, C. Widani, P. Haberler, K. Härtel, D. Kampf, T. Levin, I. Pérez Grande, A. Sanz-Andrés, and E. Schmidt, The Sunrise Mission, Solar Phys., 268(1), 1–34, doi:10.1007/s11207-010-9662-9, 2011.*
- Batista, V., A. Gould, S. Dieters, S. Dong, I. Bond, J. P. Beaulieu, D. Maoz, B. Monard, G. W. Christie, J. McCormick, M. D. Albrow, K. Horne, Y. Tsapras, M. J. Burgdorf, S. C. Novati, J. Skottfelt, J. Caldwell, S. Kozlowski, D. Kubas, B. S. Gaudi, C. Han, D. P. Bennett, J. An, F. Abe, C. S. Botzler, D. Douchin, M. Freeman, A. Fukui, K. Furusawa, J. B. Hearnshaw, S. Hosaka, Y. Itow, K. Kamiya, P. M. Kilmartin, A. Korpela, W. Lin, C. H. Ling, S. Makita, K. Masuda, Y. Matsubara, N. Miyake, Y. Muraki, M. Nagaya, K. Nishimoto, K. Ohnishi, T. Okumura, Y. C. Perrott, N. Rattenbury, T. Saito, D. J. Sullivan, T. Sumi, W. L. Sweatman, P. J. Tristram, E. Von Seggern, P. C. M. Yock, S. Brillant, J. J. Calitz, A. Cassan, A. Cole, K. Cook, C. Coutures, D. D. Prester, J. Donatowicz, J. Greenhill, M. Hoffman, F. Jablonski, S. R. Kane, N. Kains, J.-B. Marquette, R. Martin, E. Martioli, P. Meintjes, J. Menzies, E. Pedretti, K. Pollard, K. C. Sahu, C. Vinter, J. Wambsganss, R. Watson, A. Williams, M. Zub, W. Allen, G. Bolt, M. Bos, D. L. Depoy, J. Drummond, J. D. Eastman, A. Gal-Yam, E. Gorbikov, D. Higgins, J. Janczak, S. Kaspi, C.-U. Lee, F. Mallia, A. Maury, L. A. G. Monard, D. Moorhouse, N. Morgan, T. Natusch, E. O. Ofek, B.-G. Park, R. W. Pogge, D. Polishook, R. Santallo, A. Shporer, O. Spector, G. Thornley, J. C. Yee, V. Bozza, P. Browne, M. Dominik, S. Dreizler, F. Finet, M. Glitstrup, F. Grundahl, K. Harpsoe, F. V. Hessman, T. C. Hinse, M. Hundertmark, U. G. Jorgensen, C. Liebig, G. Maier, L. Mancini, M. Mathiasen, S. Rahvar, D. Ricci, G. Scarpetta, J. Southworth, J. Surdej, F. Zimmer, A. Allan, D. M. Bramich, C. Snodgrass, I. A. Steele, R. A. Street, and The MOA Collaboration, MOA-2009-BLG-*

- 387Lb: a massive planet orbiting an M dwarf, *Astron. & Astrophys.*, 529, A102, doi:10.1051/0004-6361/201016111, 2011.
- Bebesi, Z., K. Szego, A. Balogh, N. Krupp, G. Erdos, A. M. Rymer, G. R. Lewis, W. S. Kurth, D. T. Young, and M. K. Dougherty**, Response to "Comment on 'Slow-mode shock candidate in the Jovian magnetosheath' by Bebesi et al.", *Planet. Space Sci.*, 59(5-6), 445–446, doi:10.1016/j.pss.2010.10.007, 2011.
- Belton, M. J. S. , K. J. Meech, S. Chesley, J. Pittichová, B. Carcich, M. Drahus, A. Harris, S. Gillam, J. Neverka, N. Mastrodemos, W. Owen, M. F. A'Hearn, S. Bagnulo, J. Bai, L. Barrera, F. Bastien, J. M. Bauer, J. Bedient, B. C. Bhatt, H. Boehnhardt, N. Brosch, M. Buie, P. Candia, W.-P. C. P., Chian, Y.-J. Choi, A. Cochran, C. J. Crockett, S. Duddy, T. Farnham, Y. R. Fernández, P. Gutiérrez, O. R. Hainaut, D. Hampton, K. A. Herrmann, H. Hsieh, M. A. Kadooka, H. Kaluna, J. Keane, M.-J. Kim, K. Klaasen, J. Kleyna, K. Krisciunas, L. M. Lara, T. R. Lauer, J.-Y. Li, J. Licandro, C. M. Lisse, S. C. Lowry, L. McFadden, N. Moskovitz, B. Mueller, D. Polishook, N. S. Raja, T. Riesen, D. K. Sahu, N. Samarasinha, G. Sarid, T. Sekiguchi, S. Sonnett, N. B. Suntzeff, B. W. Taylor, P. Thomas, G. P. Tozzia, R. Vasundhara, J.-B. Vincent, L. H. Wasserman, B. Webster-Schultz, B. Yang, T. Zenn, and H. Zhao**, Stardust-NExT, Deep Impact, and the accelerating spin of 9P/Tempel 1, *Icarus*, 213, 345–368, doi:10.1016/j.icarus.2011.01.006, 2011.
- Berkefeld, T., W. Schmidt, D. Soltau, A. Bell, H. P. Doerr, B. Feger, R. Friedlein, K. Gerber, F. Heidecke, T. Kentischer, O. v. D. Lühe, M. Sigwarth, E. Wölde, P. Barthol, W. Deutscher, A. Gandorfer, D. Germerott, B. Grauf, R. Meller, A. Álvarez-Herrero, M. Knölker, V. Martínez Pillet, S. K. Solanki, and A. M. Title**, The Wave-Front Correction System for the Sunrise Balloon-Borne Solar Observatory, *Solar Phys.*, 268(1), 103–123, doi:10.1007/s11207-010-9676-3, 2011.
- Bertucci, C., F. Duru, N. Edberg, M. Fraenz, C. Martinecz, K. Szego, and O. Vaisberg**, Induced magnetospheres, Mars, Venus, Titan, Boundaries, Draping, Massloading, *Space Sci. Rev.*, 162(1-4), 113–171, doi:10.1007/s11214-011-9845-1, 2011.
- Bethge, C., H. Peter, T. J. Kentischer, C. Halbgewachs, D. F. Elmore, and C. Beck**, The Chromospheric Telescope, *Astron. & Astrophys.*, 534, A105, doi:10.1051/0004-6361/201117456, 2011.
- Bhardwaj, A., S. A. Haider, P. Hartogh, T. Ito, and K. Satake** (eds.), Planetary Science (PS), vol. 25 of Advances in Geosciences, World Scientific, Singapore, 2011.
- Bharti, L., M. Schüssler, and M. Rempel**, Can overturning motions in penumbral filaments be detected?, *Astrophys. J.*, 739, 35, doi:10.1088/0004-637X/739/1/35, 2011.
- Bianda, M., R. Ramelli, L. S. Anusha, J. O. Stenflo, K. N. Nagendra, R. Holzreuter, H. Sampoorna, M. Frisch, and H. N. Smitha**, Observations of the forward scattering Hanle effect in the Ca I 4227 Å line., *Astron. & Astrophys.*, 530, L13, doi:10.1051/0004-6361/201117047, 2011.
- Biele, J., S. Ulamec, M. Hilchenbach, and N. I. Koemle**, In situ analysis of Europa ices by short-range melting probes, *Adv. Space Res.*, 48(4), 755–763, doi:10.1016/j.asr.2010.02.029, 2011.
- Bingert S. and H. Peter**, Intermittent heating in the solar corona employing a 3D MHD model, *Astron. & Astrophys.*, 530, A112, doi:10.1051/0004-6361/201016019, 2011.
- A. C. Birch, A.C.; L. Gizon, and R. Burston**, Erratum: Linear sensitivity of helioseismic travel times to local flows (vol 328, pg 228, 2007), *Astron. Nachr.*, 332(6), 658–658, doi:10.1002/asna.201111557, 2011.
- Bischoff J. and K. Hehl**, Perturbation approach applied to modal diffraction methods, *J. Opt. Soc. Am.*, 25, 859–867, 2011.
- Bischoff J. and W. Neundorf**, Effective schema for the rigorous modeling of grating diffraction with focused beams, *Appl. Opt.*, 50(16), 2474–2483, 2011.

- Borisov N. and M. Fränz**, Excitation of low frequency oscillations in a planetary magnetosheath by supersonic shear flow, *Nonlin. Proc. Geophys.*, 18, 209–221, doi:10.5194/npg-18-209-2011, 2011.
- Borrero J.M. and P. Kobel**, Inferring the magnetic field vector in the quiet Sun I. Photon noise and selection criteria, *Astron. & Astrophys.*, 527, A29, doi:10.1051/0004-6361/201015634, 2011.
- Bourdin, P.-A.**, Denoising observational data, *Contributions of the Astronomical Observatory Skalnaté Pleso*, 41(2), 149–155, 2011.
- Bourouaine, S., E. Marsch, and F. M. Neubauer**, Temperature anisotropy and differential streaming of solar wind ions. Correlations with transverse fluctuations, *Astron. & Astrophys.*, 536, A39, doi:10.1051/0004-6361/201117866, 2011.
- Bourouaine, S., E. Marsch, and F.M. Neubauer**, On the Relative Speed and Temperature Ratio of Solar Wind Alpha Particles and Protons: Collisions Versus Wave Effects, *Astrophys. J.*, 728, L3–L7, doi:10.1088/2041-8205/728/1/L3, 2011.
- Bučík, R., U. Mall, A. Korth, and G. M. Mason**, STEREO observations of the energetic ions in tilted corotating interaction regions, *J. Geophys. Res.*, 116, A06103, doi:10.1029/2010JA016311, 2011.
- Bugiolacchi, R., U. Mall, M. Bhatt, S. McKenna-Lawlor, M. Banaszkiewicz, K. Brønstad, A. Nathues, F. Søraas, K. Ullaland, and R. B. Pedersen**, An in-depth look at the lunar crater Copernicus: Exposed mineralogy by high-resolution near-infrared spectroscopy, *Icarus*, 213, 43–63, doi:10.1016/j.icarus.2011.02.023, 2011.
- Cameron, R.H., L. Gizon, H. Schunker, and A. Pietarila**, Constructing Semi-Empirical Sunspot Models for Helioseismology, *Solar Phys.*, 268, 293–308, doi:10.1007/s11207-010-9631-3, 2011.
- Cameron, R.H., A. Vögler, and M. Schüssler**, Decay of a simulated mixed-polarity magnetic field in the solar surface layers, *Astron. & Astrophys.*, 533, A86, doi:10.1051/0004-6361/201116974, 2011.
- Cao, H. C. T. Russell, U. R. Christensen, M. K. Dougherty, and M. E. Burton**, Saturn's very axisymmetric magnetic field: No detectable secular variation or tilt, *Earth and Planetary Science Letters*, 304(1-2), 22–28, doi:10.1016/j.epsl.2011.02.035, 2011.
- Carbary, J.F., D. G. Mitchell, C. Paranicas, E. C. Roelof, S. M. Krimigis, N. Krupp, K. Khurana, and M. Dougherty**, Pitch angle distributions of energetic electrons at Saturn, *J. Geophys. Res.*, 116, A01216, doi:10.1029/2010JA015987, 2011.
- Carbary, J.F., C. Paranicas, D. G. Mitchell, S. M. Krimigis, and N. Krupp**, Energetic electron spectra in Saturns plasma sheet, *J. Geophys. Res.*, 116, A07210, doi:10.1029/2011JA016598, 2011.
- Carbary, J.F., D.G. Mitchell, S.M. Krimigis, N. Krupp**, Post-equinox periodicities in Saturn's energetic electrons, *Geophys. Res. Lett.* 38, L24104, doi: 10.1029/2011GL050259, 2011.
- Cheng, C.-C., C. T. Russell, V. Angelopoulos, I. R. Mann, K.-H. Glassmeier, and W. Baumjohann**, THEMIS observations of double-onset substorms and their association with IMF variations, *Ann. Geophys.*, 29(3), 591–611, doi:10.5194/angeo-29-591-2011, 2011.
- Christensen, U.R.**, Core Dynamo, in: *Encyclopedia of Solid Earth Geophysics* (edited by H. K. Gupta), vol. 1, pp. 55–63, Springer, Dordrecht, 2011, ISBN 978-90-481-8701-0.
- Christensen, U.R.**, Geodynamo models: Tools for understanding properties of Earth's magnetic field, *Phys. Earth Planet. Inter.*, 187(3-4), 157–169, doi:10.1016/j.pepi.2011.03.012, 2011.
- Christensen U.R. and N. Krupp**, Die Geschwister der Erde, in: *Aus den Elfenbeintürmen der Wissenschaft* (edited by E.-M. Neher), pp. 151–164, XLAB Science Festival 5, Wallstein Verlag, Göttingen, 2011, ISBN 978-3-8353-1027-8.
- Courtin, R., B. M. Swinyard, R. Moreno, T. Fulton, E. Lellouch, M. Rengel, and P. Hartogh**, First results of Herschel-SPIRE observations of Titan, *Astron. & Astrophys.*, 536, L2, doi:10.1051/0004-6361/201118304, 2011.

- Curdt, W.** and H. Tian, Spectroscopic evidence for helicity in explosive events, *Astron. & Astrophys.*, 532, L9, doi:10.1051/0004-6361/201117116, 2011.
- Curdt, W.**, H. Tian, and E. Marsch, The coronal convection, *Cent. Eur. Astrophys. Bull.*, 35, 187–194, 2011.
- Dadashi, N., L. Teriaca, and S. K. Solanki**, The quiet Sun average Doppler shift of coronal lines up to 2 MK, *Astron. & Astrophys.*, 534, A90, doi:10.1051/0004-6361/201117234, 2011.
- Daiffallah, K., T. Abdeletif, A. Bendib, R. Cameron, and L. Gizon**, 3D Numerical Simulations of f-Mode Propagation Through Magnetic Flux Tubes, *Solar Phys.*, 268, 309–320, doi:10.1007/s11207-010-9666-5, 2011.
- de Lucas, A., A. Dal Lago, R. Schwenn, and A. L. Clúa de Gonzalez**, Multi-spacecraft observed magnetic clouds as seen by Helios mission, *J. Atmos. Solar-Terr. Phys.*, 73(11-12), 1361–1371, doi:10.1016/j.jastp.2011.02.007, 2011.
- de Lucas, A., R. Schwenn, A. dal Lago, E. Marsch, and A. L. Clúa de Gonzalez**, Interplanetary shock wave extent in the inner heliosphere as observed by multiple spacecraft, *J. Atmos. Solar-Terr. Phys.*, 73, 1281–1292, doi:10.1016/j.jastp.2010.12.011, 2011.
- de Val-Borro, M., G. F. Gahm, H. C. Stempels, and A. Peplinski**, Modelling circumbinary gas flows in close T Tauri binaries, *Mon. Not. Roy. Astron. Soc.*, 413(4), 2679–2688, doi:10.1111/j.1365-2966.2011.18339.x, 2011.
- de Val-Borro, M., C. Jarchow, P. Hartogh**, G. L. Villanueva, and M. Küppers, Constraining Volatile Abundances in Comet C/2004 Q2 (Machholz), *Advances in Geosciences*, 25, 149–160, 2011.
- Du, J., T. L. Zhang, R. Nakamura, C. Wang, W. Baumjohann, A. M. Du, M. Volwerk, K.-H. Glassmeier, and J. P. McFadden**, Mode conversion between Alfvén and slow waves observed in the magnetotail by THEMIS, *Geophys. Res. Lett.*, 38, L07101, doi:10.1029/2011GL046989, 2011.
- Dubinin, E., M. Fraenz, A. Fedorov, R. Lundin, N. Edberg, F. Duru, and O. Vaisberg**, Ion Energization and Escape on Mars and Venus, *Space Sci. Rev.*, 162(1-4), 173–211, doi:10.1007/s11214-011-9831-7, 2011.
- Eastwood, J.P., S. J. Schwartz, T. S. Horbury, C. M. Carr, K.-H. Glassmeier, I. Richter, C. Koenders, F. Plaschke, and J. A. Wild**, Transient Pc3 wave activity generated by a hot flow anomaly: Cluster, Rosetta, and ground-based observations, *J. Geophys. Res.*, 116, A08224, doi:10.1029/2011JA016467, 2011.
- Ejeta, C., H. Boehnhardt, S. Bagnulo, and G. P. Tozzi**, Spectro-polarimetry of the bright side of Saturn's moon Iapetus, *Astron. & Astrophys.*, 537, A23, doi:10.1051/0004-6361/201117870, 2011.
- Fairbairn, M., T. Rashba, and S. Troitsky**, Photon-axion mixing and ultra-high energy cosmic rays from BL Lac type objects: Shining light through the Universe, *Phys. Rev. D*, 84(12), 125019, doi:10.1103/PhysRevD.84.125019, 2011.
- Fairen, A.G., Dohm, J.M. Dohm, V.R. Baker, S.D. Thompson, W.C. Mahaney, K.E. Herkenhoff, J.A.P. Rodriguez, A.F. Davila, D. Schulze-Makuch, M.R. El Maarry, E.R. Uceda, R. Amils, H. Miyamoto, K.J. Kim, R.C. Anderson, C.P. McKay**, Meteorites at Meridiani Planum provide evidence for significant amounts of surface and near-surface water on early Mars, *Meteoritics & Planetary Science* 46(12), 1832–1841, doi: 10.1111/j.1945-5100.2011.01297.x, 2011.
- Feher, T., H. M. Smith, T. Fulop, and K. Gal**, Simulation of runaway electron generation during plasma shutdown by impurity injection in ITER, *Plasma Phys. Control. Fusion*, 53(3), 035014, doi:10.1088/0741-3335/53/3/035014, 2011.
- Femenia, B., R. Rebolo, J. A. Perez-Prieto, S. R. Hildebrandt, L. Labadie, A. Perez-Garrido, V. J. S. Bejar, A. Diaz-Sanchez, I. Villo, A. Oscoz, R. Lopez, L. F. Rodriguez, and J. Piqueras**, Lucky Imaging

- Adaptive Optics of the brown dwarf binary GJ569Bab, Mon. Not. Roy. Astron. Soc., 413(3), 1524–1536, doi:10.1111/j.1365-2966.2011.18226.x, 2011.
- Flandes, A., H. Krüger, D. P. Hamilton, J. F. Valdés-Galicia, L. Spilker, and R. Caballero*, Magnetic field modulated dust streams from Jupiter in interplanetary space, Planet. Space Sci., 59, 1455–1471, doi:10.1016/j.pss.2011.05.014, 2011.
- Förster, M., Y. I. Feldstein, L. I. Gromova, L. A. Dremukhina, A. E. Levitin, and S. Haaland*, Plasma convection in the high-latitude ionosphere deduced from Cluster EDI data and the IMF Bx component, in: Physics of Auroral Phenomena, pp. 43–46, Polar Geophysical Institute, Apatity, Russia, 2011, ISBN 978-5-91137-182-1.
- Förster, M., S. Haaland, and E. Dorboos*, Thermospheric vorticity at high geomagnetic latitudes from CHAMP data and its IMF dependence, Ann. Geophys., 29, 181–186, doi:10.5194/angeo-29-181-2011, 2011.
- Fornasier, S., S. Mottola, M. A. Barucci, H. Sierks, and S. Hviid*, Photometric observations of asteroid 4 Vesta by the OSIRIS cameras onboard the Rosetta spacecraft, Astron. & Astrophys., 533, L9, doi:10.1051/0004-6361/201117600, 2011.
- Fuhrmann, M., N. Seehafer, G. Valori, and T. Wiegelmann*, A comparison of preprocessing methods for solar force-free magnetic field extrapolation, Astron. & Astrophys., 526, A70, doi:10.1051/004-6361/20101543, 2011.
- Gandorfer, A., B. Grauf, P. Barthol, T. L. Riethmüller, S. K. Solanki, B. Chares, W. Deutsch, S. Ebert, A. Feller, D. Germerott, K. Heerlein, J. Heinrichs, D. Hirche, J. Hirzberger, M. Kolleck, R. Meller, R. Müller, R. Schäfer, G. Tomasch, M. Knölker, V. Martínez Pillet, J. A. Bonet, W. Schmidt, T. Berkefeld, B. Feger, F. Heidecke, D. Soltau, A. Tischenberg, A. Fischer, A. Title, H. Anwand, and E. Schmidt*, The Filter Imager SuFI and the Image Stabilization and Light Distribution System ISLiD of the Sunrise Balloon-Borne Observatory: Instrument Description, Solar Phys., 268(1), 35–55, doi:10.1007/s11207-010-9636-y, 2011.
- Gastine T. and B. Dintrans*, A test of time-dependent theories of stellar convection, Astron. & Astrophys., 530, L7, doi:10.1051/0004-6361/201116766, 2011.
- Georgescu, E., F. Plaschke, U. Auster, K.-H. Fornaçon, and H. U. Frey*, Modelling of spacecraft spin period during eclipse, Ann. Geophys., 29, 875–882, doi:10.5194/angeo-29-875-2011, 2011.
- Guo, J., S. Liu, L. Fletcher, and E. P. Kontar*, Relationship Between Hard and Soft X-Ray Emission Components of a Solar Flare, Astrophys. J., 728(1), 4, doi:10.1088/0004-637X/728/1/4, 2011.
- Hanasoge, S. M., A. Birch, L. Gizon, and J. Tromp*, The Adjoint Method Applied to Time-Distance Helioseismology, Astrophys. J., 738(1), 100, doi:10.1088/0004-637X/738/1/100, 2011.
- Hanasoge, S. M., S. Succi, and S. A. Orszag*, Lattice Boltzmann method for electromagnetic wave propagation, Europhys. Lett., 96(1), 14002, doi:10.1209/0295-5075/96/14002, 2011.
- Hartogh, P., C. Jarchow, G. R. Sonnemann, and M. Grygalashvily*, Ozone distribution in the middle latitude mesosphere as derived from microwave measurements at Lindau (51.66 N, 10.13 E), J. Geophys. Res., 116, D04305, doi:10.1029/2010JD014393, 2011.
- Hartogh, P., E. Lellouch, R. Moreno, D. Bockelée-Morvan, N. Biver, T. Cassidy, M. Rengel, C. Jarchow, T. Cavalié, J. Crovisier, F. P. Helmich, and M. Kidger*, Direct detection of the Enceladus water torus with Herschel, Astron. & Astrophys., 532, L2, doi:10.1051/0004-6361/201117377, 2011.
- Hartogh, P., D. C. Lis, D. Bockelée-Morvan, M. de Val-Borro, N. Biver, M. Küppers, M. Emprechtinger, E. A. Bergin, J. Crovisier, M. Rengel, R. Moreno, S. Szutowicz, and G. A. Blake*, Ocean-like water in the Jupiter-family comet 103P/Hartley 2, Nature, 478, 218–220, doi:10.1038/nature10519, 2011.
- Hartogh, P., G. R. Sonnemann, M. Grygalashvily, and Ch. Jarchow*, Ozone trends in the mid-latitude stratopause region based on microwave measurements at Lindau (51.66 No, 10.13 Eo), the ozone

- reference model, and model calculations, *Adv. Space Res.*, 47(11), 1937–1948, doi:10.1016/j.asr.2011.01.010, 2011.
- He, J.-S., E. Marsch, C. Tu, S. Yao, and H. Tian**, Possible evidence of Alfvén-cyclotron waves in the angle distribution of magnetic helicity of solar wind turbulence, *Astrophys. J.*, 731, 85, doi:10.1088/0004-637X/731/2/85, 2011.
- He, J.-S., E. Marsch, C.-Y. Tu, Q.-G. Zong, S. Yao, and H. Tian**, Two-dimensional correlation functions for density and magnetic field fluctuations in magnetosheath turbulence measured by the Cluster spacecraft, *J. Geophys. Res.*, 116, A06207, doi:10.1029/2010JA015974, 2011.
- He, M., L. Liu, W. Wan, and Y. Wei**, Strong evidence for couplings between the ionospheric wave-4 structure and atmospheric tides, *Geophys. Res. Lett.*, 38, L14101, doi:10.1029/2011GL047855, 2011.
- Hellinger, P., L. Matteini, Štěpán Štverák, P. M. Trávníček, and E. Marsch**, Heating and cooling of protons in the fast solar wind between 0.3 and 1 AU: Helios revisited, *J. Geophys. Res.*, 116, A09105, doi:10.1029/2011JA016674, 2011.
- Heyner, D., D. Schmitt, K.-H. Glassmeier, and J. Wicht**, Dynamo action in an ambient field, *Astron. Nachr.*, 332, 36–42, doi:10.1002/asna.201011466, 2011.
- Heyner, D., J. Wicht, N. Gomez-Perez, D. Schmitt, H.-U. Auster, and K.-H. Glassmeier**, Evidence from numerical experiments for a feedback dynamo generating Mercury's magnetic field, *Science*, 334, 1690–1693, doi:10.1126/science.1207290, 2011.
- Hirzberger, J., A. Feller, T. L. Riethmüller, A. Gandorfer, and S. K. Solanki**, Performance Validation of Phase Diversity Image Reconstruction Techniques, *Astron. & Astrophys.*, 529, A132, doi:10.1051/0004-6361/201015717, 2011.
- Hoekzema, N. M., M. Garcia-Comas, O. J. Stenzel, E. V. Petrova, N. Thomas, W. J. Markiewicz, K. Gwinner, H. U. Keller, and W. A. Delamere**, Retrieving optical depth from shadows in orbiter images of Mars, *Icarus*, 214(2), 447–461, doi:10.1016/j.icarus.2011.06.009, 2011.
- Honary, F., S. R. Marple, K. Barratt, P. Chapman, M. Grill, and E. Nielsen**, Invited Article: Digital beam-forming imaging riometer systems, *Rev. Sci. Inst.*, 82(3), 031301, doi:10.1063/1.3567309, 2011.
- Hsu, H.-W., H. Krüger, and F. Postberg**, Dynamics, Composition and Origin of Jovian and Saturnian Dust Stream Particles, in: *Nanodust in the Solar System: Discoveries and Interpretations* (edited by A. C. Ingrid Mann, Nicole Meyer-Vernet), *Astrophysics and Space Science Library*, Springer, Heidelberg, 2011, ISBN 978-3-642-27542-5.
- Hulot, G., A. Balogh, U. R. Christensen, C. Constable, M. Mandea, and N. Olsen** (eds.), *Terrestrial Magnetism*, vol. 36 of *Space Sciences Series of ISSI*, Springer, Berlin, 2011, ISBN 978-1-4419-7954-4, 400 pp.
- Innes, D. E., R. H. Cameron, and S. K. Solanki**, EUV Jets, Type III Radio Bursts and Sunspot Waves Investigated Using SDO/AIA Observations, *Astron. & Astrophys.*, 531, L13, doi:10.1051/0004-6361/201117255, 2011.
- İşik, E., D. Schmitt, and M. Schüssler**, Magnetic flux generation and transport in cool stars, *Astron. & Astrophys.*, 528, A135, doi:10.1051/0004-6361/201014501, 2011.
- Irastorza, I. A., S. Aune, K. Barth, A. Belov, S. Borghi, H. Bräuninger, G. Cantatore, J. M. Carmona, S. A. Cetin, J. I. Collar, T. Dafni, M. Davenport, C. Eleftheriadis, N. Elias, C. Ezer, G. Fanourakis, E. Ferrer-Ribas, P. Friedrich, J. Galán, A. Gardikiotis, E. N. Gazis, T. Geralis, I. Giomataris, S. Gninenko, H. Gómez, E. Gruber, T. Guthörl, R. Hartmann, F. Haug, M. D. Hasinoff, D. H. H. Hoffmann, F. J. Iguaz, J. Jacoby, K. Jakovčić, M. Karuza, K. Königsmann, R. Kotthaus, M. Krčmar, M. Kuster, B. Lakić, J. M. Laurent, A. Liolios, A. Ljubićić, V. Lozza, G. Lutz, G. Luzón, J. Morales, T. Niinikoski, A. Nordt, T. Papaevangelou, M. J. Pivovaroff, G. Raffelt, T. Rashba, H. Riege, A. Rodríguez, M. Rosu, J. Ruz, I.**

- Savvidis, P. S. Silva, S. K. Solanki, R. Soufli, L. Stewart, A. Tomás, M. Tsagri, K. van Bibber, T. Vafeiadis, J. Villar, J. K. Vogel, S. C. Yıldız, and K. Zioutas**, Latest results and prospects of the CERN Axion Solar Telescope, Journal of Physics Conference Series, 309(1), 012001, doi:10.1088/1742-6596/309/1/012001, 2011.
- Ivanova, O. V., Y. V. Skorov, P. P. Korsun, V. L. Afanasiev, and J. Blum**, Observations of the long-lasting activity of the distant Comets 29P Schwassmann-Wachmann 1, C/2003 WT42 (LINEAR) and C/2002 VQ94 (LINEAR), Icarus, 211(1), 559–567, doi:10.1016/j.icarus.2010.10.026, 2011.
- Jain, R., A. K. Awasthi, B. Chandel, **L. Bharti**, Y. Hanaoka, and A. L. Kiplinger, Probing the Role of Magnetic-Field Variations in NOAA AR 8038 in Producing a Solar Flare and CME on 12 May 1997, Solar Phys., 271(1-2), 57–74, doi:10.1007/s11207-011-9793-7, 2011.
- Javadi, S., J. Büchner, A. Otto, and J. C. Santos**, About the relative importance of compressional heating and current dissipation for the formation of coronal X-ray bright points, Astron. & Astrophys., 529, A114, doi:10.1051/0004-6361/201015614, 2011.
- Jiang, J., R. H. Cameron, D. Schmitt, and M. Schüssler**, Can Surface Flux Transport Account for the Weak Polar Field in Cycle 23?, Space Sci. Rev., doi:10.1007/s11214-011-9783-y, 2011,
- Jiang, J., R. H. Cameron, D. Schmitt, and M. Schüssler**, The solar magnetic field since 1700 I. Characteristics of sunspot group emergence and reconstruction of the butterfly diagram, Astron. & Astrophys., 528, A82, doi:10.1051/0004-6361/201016167, 2011.
- Jiang, J., R. H. Cameron, D. Schmitt, and M. Schüssler**, The solar magnetic field since 1700 II. Physical reconstruction of total, polar and open flux, Astron. & Astrophys., 528, A83, doi:10.1051/0004-6361/201016168, 2011.
- Jing, J., Y. Yuan, K. Reardon, T. Wiegelmans, Y. Xu, and H. Wang**, Nonpotentiality of Chromospheric Fibrils in Noaa Active Regions 11092 and 9661, Astrophys. J., 739(2), 67, doi:10.1088/0004-637X/739/2/67, 2011.
- Jockers, K., S. Szutowicz, G. Villanueva, T. Bonev, and P. Hartogh**, HCN and CN in Comet 2P/Encke: Models of the non-isotropic, rotation-modulated coma and CN parent life time, Icarus, 215, 153–185, doi:10.1016/j.icarus.2011.06.038, 2011.
- Jones, C. A., P. Boronski, A. S. Brun, G. A. Glatzmaier, T. Gastine, M. S. Miesch, and J. Wicht**, Anelastic convection-driven dynamo benchmarks, Icarus, 216, 120–135, doi:10.1016/j.icarus.2011.08.014, 2011.
- Joshi, B., A. M. Veronig, J. Lee, S.-C. Bong, S. K. Tiwari, K.-S. Cho**, Pre-flare Activity and Magnetic Reconnection during the Evolutionary Stages of Energy Release in a Solar Eruptive Flare, Astrophys. J., 743(2), 195, doi: 10.1088/0004-637X/743/2/195, 2011.
- Joshi, J., A. Pietarila, J. Hirzberger, S. K. Solanki, R. Aznar Cuadrado, and L. Merenda**, Convective Nature of Sunspot Penumbra Filaments: Discovery of Downflows in the Deep Photosphere, Astrophys. J., 734, L18, doi:10.1088/2041-8205/734/1/L18, 2011.
- Joshi, J., A. Pietarila, J. Hirzberger, S. K. Solanki, R. A. Cuadrado, and L. Merenda**, Erratum: "Convective Nature Of Sunspot Penumbra Filaments: Discovery Of Downflows In The Deep Photosphere" (vol 734, pg L18, 2011), Astrophys. J., 740(2), L55, doi:10.1088/2041-8205/740/2/L55, 2011.
- Kamio, S., W. Curdt, L. Teriaca, and D. E. Innes**, Evolution of microflares associated with bright points in coronal holes and in quiet regions, Astron. & Astrophys., 529, A21, doi:10.1051/0004-6361/201015715, 2011.
- Kamio, S., H. Peter, W. Curdt, and S. K. Solanki**, Continuous upflows and sporadic downflows observed in active regions, Astron. & Astrophys., 532, A96, doi:10.1051/0004-6361/201117188, 2011.

- Karlicky M. and M. Barta**, Successive Merging of Plasmoids and Fragmentation in a Flare Current Sheet and Their X-Ray and Radio Signatures, *Astrophys. J.*, 733(2), 107, doi:10.1088/0004-637X/733/2/107, 2011.
- Kasahara, S., E. A. Kronberg, N. Krupp, T. Kimura, C. Tao, S. V. Badman, A. Retinò, and M. Fujimoto**, Magnetic reconnection in the Jovian tail: X-line evolution and consequent plasma sheet structures, *J. Geophys. Res.*, 116, A11219, doi:10.1029/2011JA016892, 2011.
- Kasai, Y., H. Sagawa, T. Kuroda, T. Manabe, S. Ochiai, K.-i. Kikuchi, T. Nishibori, P. Baron, J. Mendrok, P. Hartogh, D. Murtagh, J. Urban, F. von Schéele, and U. Frisk**, Overview of the Martian atmospheric submillimetre sounder FIRE, *Planet. Space Sci.*, 63-64, 62–82, doi:10.1016/j.pss.2011.10.013, 2011.
- Katoh, Y., F. Tsuchiya, Y. Miyoshi, A. Morioka, H. Misawa, R. Ujiie, W. S. Kurth, A. T. Tomás, and N. Krupp**, Whistler mode chorus enhancements in association with energetic electron signatures in the Jovian magnetosphere, *J. Geophys. Res.*, 116, A02215, doi:10.1029/2010JA016183, 2011.
- Kesden M. and S. Hanasoge**, Transient Solar Oscillations Driven by Primordial Black Holes, *Phys. Rev. Lett.*, 107(11), 111101, doi:10.1103/PhysRevLett.107.111101, 2011.
- Kleint, L., A. Feller, and D. Gisler**, Imaging spectropolarimetry with two LiNbO₃ Fabry Pérot interferometers and a spectrograph, *Astron. & Astrophys.*, 529, A78, doi:10.1051/0004-6361/201015870, 2011.
- Kobel, P., K. Solanki, and J. M. Borrero**, The Continuum Intensity as a Function of Magnetic Field. I. Active Region and Quiet Sun Magnetic Elements, *Astron. & Astrophys.*, 531, A112, doi:10.1051/0004-6361/201016255, 2011.
- Kollmann, P., E. Roussos, C. Paranicas, N. Krupp, C. Jackman, E. Kirsch, and K.-H. Glaßmeier**, Energetic particle phase space densities at Saturn: Cassini observations and interpretations, *J. Geophys. Res.*, 116, A05222, doi:10.1029/2010JA016221, 2011.
- Korth, A., E. Echer, Q.-G. Zong, F. L. Guarnieri, M. Fraenz, and C. G. Mouikis**, The response of the polar cusp to a high speed solar wind stream studied by a multispacecraft wavelet analysis, *J. Atmos. Solar-Terr. Phys.*, 73, 52–60, doi:10.1016/j.jastp.2009.10.004, 2011.
- Krivova, N. A., S. K. Solanki, and W. Schmutz**, Solar Total Irradiance in Cycle 23, *Astron. & Astrophys.*, 529, A81, doi:10.1051/0004-6361/201016234, 2011.
- Krivova, N. A., S. K. Solanki, and Y. C. Unruh**, Towards a Long-Term Record of Solar Total and Spectral Irradiance, *J. Atmos. Solar-Terr. Phys.*, 73, 223–234, doi:10.1016/j.jastp.2009.11.013, 2011.
- Kronberg, E. A., R. Bućik, S. Haaland, B. Klecker, K. Keika, M. I. Desai, P. W. Daly, M. Yamauchi, R. Gómez-Herrero, and A. T. Y. Lui**, On the origin of the energetic ion events measured upstream the Earth's bow shock by STEREO, Cluster and Geotail, *J. Geophys. Res.*, 116, A02210, doi:10.1029/2010JA015561, 2011.
- Kumar, B., P. Venkatakrishnan, S. Mathur, S. K. Tiwari, R. A. Garcia**, On the Flare-induced Seismicity in the Active Region NOAA 10930 and Related Enhancement of Global Waves in the Sun, *Astrophys. J.*, 743(1), 29, doi: 10.1088/0004-637X/743/1/29, 2011.
- Labadie, L., R. Rebolo, I. Villo, J. A. Perez-Prieto, A. Perez-Garrido, S. R. Hildebrandt, B. Femenia, A. Diaz-Sanchez, V. J. S. Bejar, A. Oscoz, R. Lopez, J. Piqueras, and L. F. Rodriguez**, High-contrast optical imaging of companions: the case of the brown dwarf binary HD 130948BC, *Astron. & Astrophys.*, 526, A144, doi:10.1051/0004-6361/201014358, 2011.
- Le Corre, L., V. Reddy, A. Nathues, and E. A. Cloutis**, How to characterize terrains on 4 Vesta using Dawn Framing Camera color bands?, *Icarus*, 216(2), 376–386, doi:10.1016/j.icarus.2011.09.014, 2011.

Lee K. W. and J. Büchner, Anomalous momentum transport in astrophysical return-current beam plasmas — the two-dimensional electromagnetic case, in: *Advances in Plasma Astrophysics* (edited by A. Bonnano, E. de Gouveia dal Pino, and A. Kosovichev), vol. IAU Symposium No. 274, pp. 106–109, International Astronomical Union, 2011.

Lee K. W. and J. Büchner, Collisionless turbulent transport and anisotropic electron heating in coronal flare loops, *Astron. & Astrophys.*, 535, A61, doi:10.1051/0004-6361/201117186, 2011.

Lee K. W. and J. Büchner, Turbulent anomalous transport and anisotropic electron heating in a return current system, *Phys. Plasmas*, 18, 022308, doi:10.1063/1.3553026, 2011.

Leer, K., W. Goetz, M. A. Chan, S. Gorevan, M. F. Hansen, C. L. Jensen, G. Kletetschka, A. Kusack, and M. B. Madsen, RAT magnet experiment on the Mars Exploration Rovers: Spirit and Opportunity beyond sol 500, *J. Geophys. Res.*, 116, E00F18, doi:10.1029/2010JE003667, 2011.

Licandro, J., H. Campins, G. P. Tozzi, J. de León, N. Pinilla-Alonso, H. Boehnhardt, and O. R. Hainaut, Testing the comet nature of main belt comets. The spectra of 133P/Elst-Pizarro and 176P/LINEAR, *Astron. & Astrophys.*, 532, A65, doi:10.1051/0004-6361/201117018, 2011.

Liu, J., V. Angelopoulos, M. Kubyshkina, J. McFadden, K.-H. Glassmeier, and C. T. Russell, Revised timing and onset location of two isolated substorms observed by Time History of Events and Macroscale Interactions During Substorms (THEMIS), *J. Geophys. Res.*, 116, A00I17, doi:10.1029/2010JA015877, 2011.

Liu, J., C. Gabrielse, V. Angelopoulos, N. A. Frissell, L. R. Lyons, J. P. McFadden, J. Bonnell, and K. H. Glassmeier, Superposed epoch analysis of magnetotail flux transport during substorms observed by THEMIS, *J. Geophys. Res.*, 116, A00I29, doi:10.1029/2010JA015886, 2011.

Liu, W., T. E. Sarris, X. Li, Q.-G. Zong, R. Ergun, V. Angelopoulos, and K.-H. Glassmeier, Spatial structure and temporal evolution of a dayside poloidal ULF wave event, *Geophys. Res. Lett.*, 38, L19104, doi:10.1029/2011GL049476, 2011.

Lundin, R., S. Barabash, E. Dubinin, D. Winningham, and M. Yamauchi, Low-altitude acceleration of ionospheric ions at Mars, *Geophys. Res. Lett.*, 38, L08108, doi:10.1029/2011GL047064, 2011.

Machtaoub, G., A. Medvedev, and P. Hartogh, Simulations of the water cycle on Mars with a general circulation model, in: *Planetary Science* (edited by A. Bhardwaj, S. A. Haider, P. Hartogh, and T. Ito), vol. 25 of *Advances in Geosciences*, chap. 14, pp. 187 – 194, World Scientific Publishing Company, Singapore, 2011.

Maltagliati, L., D. V. Titov, T. Encrenaz, R. Melchiorri, F. Forget, H. U. Keller, and J.-P. Bibring, Annual survey of water vapor behavior from the OMEGA mapping spectrometer onboard Mars Express, *Icarus*, 213(2), 480–495, doi:10.1016/j.icarus.2011.03.030, 2011.

Marsch, E., The Two-Component Majorana Equation—Novel Derivations and Known Symmetries, *Journal of Modern Physics*, 2, 1109–1114, doi:10.4236/jmp.2011.210137, 2011.

Marsch E. and S. Bourouaine, Velocity-space diffusion of solar wind protons in oblique waves and weak turbulence, *Ann. Geophys.*, 29, 2089–2099, doi:10.5194/angeo-29-2089-2011, 2011.

Marsch E. and D. Verscharen, On nonlinear Alfvén-cyclotron waves in multi-species plasma, *J. Plasma Phys.*, 77, 385–403, doi:10.1017/S0022377810000541, 2011.

Martínez González, M. J., A. Asensio Ramos, R. Manso Sainz, E. Khomenko, V. Martínez Pillet, S. K. Solanki, A. López Ariste, W. Schmidt, P. Barthol, and A. Gandorfer, Unnoticed Magnetic Field Oscillations in the Very Quiet Sun Revealed by Sunrise/IMaX., *Astrophys. J.*, 730, L37, doi:10.1088/2041-8205/730/2/L37, 2011.

Martínez Pillet, V., J. C. Del Toro Iniesta, A. Álvarez-Herrero, V. Domingo, J. A. Bonet, L. González Fernández, A. López Jiménez, C. Pastor, J. L. Gasent Blesa, P. Mellado, J. Piqueras, B. Aparicio, M. Balaguer, E. Ballesteros, T. Belenguer, L. R. Bellot Rubio, T. Berkefeld, M. Collados, W. Deutsch, A.

- Feller, F. Girela, B. Grauf, R. L. Heredero, M. Herranz, J. M. Jerónimo, H. Laguna, R. Meller, M. Menéndez, R. Morales, D. Orozco Suárez, G. Ramos, M. Reina, J. L. Ramos, P. Rodríguez, A. Sánchez, N. Uribe-Patarroyo, P. Barthol, A. Gандорфер, M. Knoelker, W. Schmidt, S. K. Solanki, and S. Vargas Domínguez,** The Imaging Magnetograph eXperiment (IMaX) for the Sunrise Balloon-Borne Solar Observatory, *Solar Phys.*, 268(1), 57–102, doi:10.1007/s11207-010-9644-y, 2011.
- Matthews, S. A., D. R. Williams, K.-L. Klein, E. P. Kontar, D. M. Smith, A. Lagg, S. Krucker, G. J. Hurford, N. Vilmer, A. L. MacKinnon, V. V. Zharkova, L. Fletcher, I. G. Hannah, P. K. Browning, D. E. Innes, G. Trottet, C. Foullon, V. M. Nakariakov, L. M. Green, H. Lamoureux, C. Forsyth, D. M. Walton, M. Mathioudakis, A. Gандорфер, V. Martinez-Pillet, O. Limousin, E. Verwichte, S. Dalla, G. Mann, H. Aurass, and T. Neukirch,** Solar Particle Acceleration Radiation and Kinetics (SPARK), *Experimental Astronomy*, 33, 237–269, doi:10.1007/s10686-011-9260-3, 2011.
- Medvedev, A. S., T. Kuroda, and P. Hartogh,** Influence of dust on the dynamics of the martian atmosphere above the first scale height, *Aeolian Research*, 3, 145–156, doi:10.1016/j.aeolia.2011.05.001, 2011.
- Medvedev, A. S., E. Yiğit, and P. Hartogh,** Estimates of gravity wave drag on Mars: indication of a possible lower thermospheric wind reversal, *Icarus*, 211, 909–912, doi:10.1016/j.icarus.2010.10.013, 2011.
- Medvedev, A. S., E. Yiğit, P. Hartogh, and E. Becker,** Influence of gravity waves on the Martian atmosphere: General circulation modeling, *J. Geophys. Res.*, 116, E10004, doi:10.1029/2011JE003848, 2011.
- Meech, K. J., M. F. A'Hearn, J. A. Adams, P. Bacci, J. Bai, L. Barrera, M. Battelino, J. M. Bauer, E. Becklin, B. Bhatt, N. Biver, D. Bockelée-Morvan, D. Bodewits, H. Böhnhardt, J. Boissier, B. P. Bonev, W. Borghini, J. R. Brucato, E. Bryssinckx, M. W. Buie, H. Canovas, D. Castellano, S. B. Charnley, W. P. Chen, P. Chiang, Y.-J. Choi, D. J. Christian, Y.-L. Chuang, A. L. Cochran, P. Colom, M. R. Combi, I. M. Coulson, J. Crovisier, N. Dello Russo, K. Dennerl, K. DeWahl, M. A. DiSanti, M. Facchini, T. L. Farnham, Y. Fernández, H. G. Florén, U. Frisk, T. Fujiyoshi, R. Furusho, T. Fuse, G. Galli, D. A. García-Hernández, A. Gersch, Z. Getu, E. L. Gibb, M. Gillon, E. Guido, R. A. Guillermo, E. Hadamcik, O. Hainaut, H. B. Hammel, D. E. Harker, J. K. Harmon, W. M. Harris, P. Hartogh, M. Hashimoto, B. Häusler, T. Herter, A. Hjalmarson, S. T. Holland, M. Honda, S. Hosseini, E. S. Howell, N. Howes, H. Hsieh, H.-Y. Hsiao, D. Hutsemékers, S. M. Immler, W. M. Jackson, S. V. Jeffers, E. Jehin, T. J. Jones, M. de Juan Ovelar, H. M. Kaluna, T. Karlsson, H. Kawakita, J. V. Keane, M. S. K. L. D. Keller and, D. Kinoshita, N. N. Kiselev, M. M. K. J. Kleyna, H. Kobayashi, H. A. Kobulnicky, L. Kolokolova, M. Kreiny, Y.-J. Kuan, M. Küppers, J. M. Lacruz, W. B. Landsman, L. M. Lara, A. Lecacheux, A. C. Levasseur-Regourd, B. Li, J. Licandro, R. Ligustri, Z.-Y. Lin, M. Lippi, D. C. Lis, C. M. Lisse, A. J. Lovell, S. C. Lowry, H. Lu, S. Lundin, K. Magee-Sauer, P. Magain, J. Manfroid, E. Mazzotta Epifani, A. McKay, M. D. Melita, H. Mikuz, S. N. Milam, G. Milani, M. Min, R. Moreno, B. E. A. Mueller, M. J. Mumma, M. Nicolini, M. C. Nolan, H. L. Nordh, P. B. Nowajewski, O. Team, T. Ootsubo, L. Paganini, C. Perrella, J. Pittichová, E. Prosperi, Y. L. Radeva, W. T. Reach, A. J. Remijan, M. Rengel, T. E. Riesen, M. Rodenhuis, D. P. Rodríguez, R. W. Russell, D. K. Sahu, N. H. Samarasinha, A. S. Caso, A. Sandqvist, G. Sarid, M. Sato, D. G. Schleicher, E. W. Schwerterman, A. K. Sen, D. Shenoy, J.-C. Shi, Y. Shinnaka, J. Skvarc, C. Snodgrass, M. L. Sitko, S. Sonnett, S. Sosseini, G. Sostero, S. Sugita, B. M. Swinyard, S. Szutowicz, N. Takato, P. Tanga, P. A. Taylor, G.-P. Tozzi, R. Trabatti, J. M. Trigo-Rodríguez, C. Tubiana, M. de Val-Borro, W. Vacca, B. Vandenbussche, J. Vaubaillon, F. P. Velichko, S. F. Velichko, R. J. Vervack, Jr., M. J. Vidal-Nunez, G. L. Villanueva, C. Vinante, J.-B. Vincent, M. Wang, L. H. Wasserman, J. Watanabe, H. A. Weaver, P. R. Weissman, S. Wolk, D. H. Wooden, C. E. Woodward, M. Yamaguchi, T. Yamashita, P. A. Yanamandra-Fischer, J.-S. Y. B. Yang, D. K. Yeomans, T. Zenn, H. Zhao, and J. E. Ziffer,**
- EPOXI: Comet 103P/Hartley 2 observations from a worldwide campaign, *Astrophys. J.*, 734, L1, doi:10.1088/2041-8205/734/1/L1, 2011.
- Meech, K. J., J. Pittichová, B. Yang, A. Zenn, M. J. S. Belton, M. F. A'Hearn, S. Bagnulo, J. Bai, L. Barrera, J. M. Bauer, J. C. Bhatt, H. Boehnhardt, N. Brosch, M. Buie, P. Candia, W.-P. Chen, S. Chesley, P.**

- Chiang, Y.-J. Choi, A. Cochran, S. Duddy, T. L. Farnham, Y. Fernández, P. Gutiérrez, O. R. Hainaut, D. Hampton, K. Herrmann, H. Hsieh, M. A. Kadooka, H. Kaluna, J. Keane, M.-J. Kim, J. Kleyna, K. Krisciunas, T. R. Lauer, L. Lara, J. Licandro, S. C. Lowry, L. A. McFadden, N. Moskovitz, B. E. A. Mueller, D. Polishook, N. S. Raj, T. Riesen, D. K. Sahu, N. H. Samarasinha, G. Sarid, T. Sekiguchi, S. Sonnett, N. Suntzeff, B. Taylor, G. P. Tozzi, R. Vasundhar, J.-B. Vincent, L. Wasserman, B. Webster-Schultz, and H. Zhao, Deep Impact, Stardust-NExT and the behavior of Comet 9P/Tempel 1 from 1997 to 2010, Icarus, 213, 323–344, doi:10.1016/j.icarus.2011.02.016, 2011.*
- Mehta, M., N. O. Renno, J. Marshall, M. R. Grover, A. Sengupta, N. A. Rusche, J. F. Kok, R. E. Arvidson, W. J. Markiewicz, M. T. Lemmon, and P. H. Smith, Explosive erosion during the Phoenix landing exposes subsurface water on Mars, Icarus, 211(1), 172–194, doi:10.1016/j.icarus.2010.10.003, 2011.*
- Mellado, E. M., K. Hornung, R. Srama, J. Kissel, S. P. Armes, and S. Fujii, Mass spectrometry of impact fragmented polymers: The role of target properties, Int. J. Impact Eng., 38(6), 486–494, doi:10.1016/j.ijimpeng.2010.10.020, 2011.*
- Merenda, L., A. Lagg, and S. K. Solanki, The height of chromospheric loops in an emerging flux region, Astron. & Astrophys., 532, A63, doi:10.1051/0004-6361/201014988, 2011.*
- Meuris, A., F. Aschauer, G. De Vita, B. Guenther, S. Herrmann, T. Lauf, P. Lechner, G. Lutz, P. Majewski, D. Miessner, M. Porro, J. Reiffers, A. Stefanescu, F. Schopper, H. Soltau, L. Strueder, and J. Treis, Development and Characterization of New 256 x 256 Pixel DEPFET Detectors for X-Ray Astronomy, IEEE Trans. Nucl. Sci., 58(3), 1206–1211, doi:10.1109/TNS.2011.2126599, 2011.*
- Mierla, M., I. Chifu, B. Inhester, L. Rodriguez, and A. Zhukov, Low polarised emission from the core of coronal mass ejections, Astron. & Astrophys., 530, L1, doi:10.1051/0004-6361/201016295, 2011.*
- Miyake, N., T. Sumi, S. Dong, R. Street, L. Mancini, A. Gould, D. P. Bennett, Y. Tsapras, J. C. Yee, M. D. Albrow, I. A. Bond, P. Fouque, P. Browne, C. Han, C. Snodgrass, F. Finet, K. Furusawa, K. Harpsoe, W. Allen, M. Hundertmark, M. Freeman, D. Suzuki, F. Abe, C. S. Botzler, D. Douchin, A. Fukui, F. Hayashi, J. B. Hearnshaw, S. Hosaka, Y. Itow, K. Kamiya, P. M. Kilmartin, A. Korpela, W. Lin, C. H. Ling, S. Makita, K. Masuda, Y. Matsubara, Y. Muraki, T. Nagayama, K. Nishimoto, K. Ohnishi, Y. C. Perrott, N. Rattenbury, T. Saito, L. Skuljan, D. J. Sullivan, W. L. Sweatman, P. J. Tristram, K. Wada, P. C. M. Yock, G. Bolt, M. Bos, G. W. Christie, D. L. DePoy, J. Drummond, A. Gal-Yam, B. S. Gaudi, E. Gorbikov, D. Higgins, K.-H. Hwang, J. Janczak, S. Kaspi, C.-U. Lee, J.-R. Koo, S. Kozlowski, Y. Lee, F. Mallia, A. Maury, D. Maoz, J. McCormick, L. A. G. Monard, D. Moorhouse, J. A. Munoz, T. Natusch, E. O. Ofek, R. W. Pogge, D. Polishook, R. Santallo, A. Shporer, O. Spector, G. Thornley, A. Allan, D. M. Bramich, K. Horne, N. Kains, I. Steele, V. Bozza, M. J. Burgdorf, S. C. Novati, M. Dominik, S. Dreizler, M. Glitstrup, F. V. Hessman, T. C. Hinse, U. G. Jorgensen, C. Liebig, G. Maier, M. Mathiasen, S. Rahvar, D. Ricci, G. Scarpetta, J. Skottfelt, J. Southworth, J. Surdej, J. Wambsganss, F. Zimmer, V. Batista, J. P. Beaulieu, S. Brabant, A. Cassan, A. Cole, E. Corrales, C. Coutures, S. Dieters, J. Greenhill, D. Kubas, J. Menzies, and The Moa Collaboration, A Sub-Saturn Mass Planet, MOA-2009-BLG-319Lb, Astrophys. J., 728(2), 120, doi:10.1088/0004-637X/728/2/120, 2011.*
- Moll, R., R. H. Cameron, and M. Schüssler, Vortices in simulations of solar surface convection, Astron. & Astrophys., 533, A126, doi:10.1051/0004-6361/201117441, 2011.*
- Moll, R., J. Pietarila Graham, J. Pratt, R. H. Cameron, W. C. Müller, and M. Schüssler, Universality of the Small-scale Dynamo Mechanism, Astrophys. J., 736, 36, doi:10.1088/0004-637X/736/1/36, 2011.*
- Moreno, R., E. Lellouch, L. M. Lara, R. Courtin, D. Bockeleé-Morvan, P. Hartogh, M. Rengel, N. Biver, M. Banaszkiewicz, and A. González, First detection of hydrogen isocyanide (HNC) in Titan's atmosphere, Astron. & Astrophys., 536, L12, doi:10.1051/0004-6361/201118189, 2011.*

- Muller, J., S. Simon, U. Motschmann, J. Schule, **K.-H. Glassmeier**, G. J. Pringle, AIKEF: Adaptive hybrid model for space plasma simulations, Computer Physics Communications, 182(4), 946-966, doi: 10.1016/j.cpc.2010.12.033, 2011.
- Mumma, M. J., B. P. Bonev, G. L. Villanueva, **L. Paganini**, M. A. DiSanti, E. L. Gibb, J. V. Keane, K. J. Meech, G. A. Blake, R. S. Ellis, **M. Lippi**, H. Boehnhardt, and K. Magee-Sauer, Temporal and Spatial Aspects of Gas Release During the 2010 Apparition of Comet 103P/Hartley 2, *Astrophys. J.*, 734, L7, doi:10.1088/2041-8205/734/1/L7, 2011.
- Muraki, Y., C. Han, D. P. Bennett, D. Suzuki, L. A. G. Monard, R. Street, U. G. Jorgensen, P. Kundurthy, J. Skowron, A. C. Becker, M. D. Albrow, P. Fouque, D. Heyrovsky, R. K. Barry, J.-P. Beaulieu, D. D. Wellnitz, I. A. Bond, T. Sumi, S. Dong, B. S. Gaudi, M. Bramich, M. Dominik, F. Abe, C. S. Botzler, M. Freeman, A. Fukui, K. Furusawa, F. Hayashi, J. B. Hearnshaw, S. Hosaka, Y. Itow, K. Kamiya, A. V. Korpela, P. M. Kilmartin, W. Lin, C. H. Ling, S. Makita, K. Masuda, Y. Matsubara, N. Miyake, K. Nishimoto, K. Ohnishi, Y. C. Perrott, N. J. Rattenbury, T. Saito, L. Skuljan, D. J. Sullivan, W. L. Sweatman, P. J. Tristram, K. Wada, P. C. M. Yock, G. W. Christie, D. L. DePoy, E. Gorbikov, A. Gould, S. Kaspi, C.-U. Lee, F. Mallia, D. Maoz, J. McCormick, D. Moorhouse, T. Natusch, B.-G. Park, R. W. Pogge, D. Polishook, A. Shporer, G. Thornley, J. C. Yee, A. Allan, P. Browne, K. Horne, N. Kains, **C. Snodgrass**, I. Steele, Y. Tsapras, V. Batista, C. S. Bennett, S. Brillant, J. A. R. Caldwell, A. Cassan, A. Cole, R. Corrales, C. Coutures, S. Dieters, D. D. Prester, J. Donatowicz, J. Greenhill, D. Kubas, J.-B. Marquette, R. Martin, J. Menzies, K. C. Sahu, I. Waldman, A. Williams, M. Zub, H. Bourhous, Y. Matsuoka, T. Nagayama, N. Oi, Z. Randriamanakoto, V. Bozza, M. J. Burgdorf, S. C. Novati, S. Dreizler, F. Finet, M. Glitrup, K. Harpsoe, T. C. Hinse, M. Hundertmark, C. Liebig, G. Maier, L. Mancini, M. Mathiasen, S. Rahvar, D. Ricci, G. Scarpetta, J. Skottfelt, J. Surdej, J. Southworth, J. Wambsganss, F. Zimmer, A. Udalski, R. Poleski, L. Wyrzykowski, K. Ulaczyk, M. K. Szymanski, M. Kubiak, G. Pietrzynski, I. Soszynski, and The MOA Collaboration, Discovery and Mass Measurements of a Cold, 10 Earth Mass Planet and its Host Star, *Astrophys. J.*, 741(1), 22, doi:10.1088/0004-637X/741/1/22, 2011.
- Narita, Y., S. P. Gary, S. Saito, **K.-H. Glassmeier**, and U. Motschmann, Dispersion relation analysis of solar wind turbulence, *Geophys. Res. Lett.*, 38, L05101, doi:10.1029/2010GL046588, 2011.
- Narita, Y., **K.-H. Glassmeier**, M. L. Goldstein, U. Motschmann, and F. Sahraoui, Three-dimensional spatial structures of solar wind turbulence from 10000-km to 100-km scales, *Ann. Geophys.*, 29(10), 1731–1738, doi:10.5194/angeo-29-1731-2011, 2011.
- Narita, Y., **K.-H. Glassmeier**, and U. Motschmann, High-resolution wave number spectrum using multi-point measurements in space - the Multi-point Signal Resonator (MSR) technique, *Ann. Geophys.*, 29(2), 351–360, doi:10.5194/angeo-29-351-2011, 2011.
- Németh, Z., K. Szego, Z. Bebesi, G. Erdös, L. Foldy, A. Rymer, E. C. Sittler, A. J. Coates, and A. Wellbrock, Ion distributions of different Kronian plasma regions, *J. Geophys. Res.*, 116, A09212, doi:10.1029/2011JA016585, 2011.
- Newham, D. A., P. J. Espy, M. A. Clilverd, C. J. Rodger, A. Seppälä, D. J. Maxfield, **P. Hartogh**, and K. Holmén, Direct observations of nitric oxide produced by energetic electron precipitation into the Antarctic middle atmosphere, *Geophys. Res. Lett.*, 38, L20104, doi:10.1029/2011GL048666, 2011.
- Oberst, J., J. Flohrer, S. Elgner, **T. Maué**, A. Margonis, R. Schroedter, W. Tost, M. Buhl, J. Ehrich, A. Christou, and D. Koschny, The Smart Panoramic Optical Sensor Head (SPOSH)-A camera for observations of transient luminous events on planetary night sides, *Planet. Space Sci.*, 59(1), 1–9, doi:10.1016/j.pss.2010.09.016, 2011.
- Obreschkow, D., M. Tingueley, N. Dorsaz, **P. Kobel**, A. de Bosset, and M. Farhat, Universal Scaling Law for Jets of Collapsing Bubbles, *Phys. Rev. Lett.*, 107(20), 204501, doi:10.1103/PhysRevLett.107.204501, 2011.

- Ogasawara, K., S. A. Livi, D. G. Mitchell, T. P. Armstrong, and N. Krupp*, Properties of energetic particle bursts at dawnside magnetosheath: Cassini observations during the 1999 Earth swing-by, *J. Geophys. Res.*, 116, A12207, doi:10.1029/2011JA016813, 2011.
- Østgaard, N., K. M. Laundal, L. Juusola, A. Åsnes, S. E. Haaland, and J. M. Weygand*, Interhemispherical asymmetry of substorm onset locations and the interplanetary magnetic field, *Geophys. Res. Lett.*, 38, L08104, doi:10.1029/2011GL046767, 2011.
- Paetzold, M., T. P. Andert, S. W. Asmar, J. D. Anderson, J.-P. Barriot, M. K. Bird, B. Haeusler, M. Hahn, S. Tellmann, H. Sierks, P. Lamy, and B. P. Weiss*, Asteroid 21 Lutetia: Low Mass, High Density, *Science*, 334(6055), 491–492, doi:10.1126/science.1209389, 2011.
- Perez-Grande, I., A. Sanz-Andres, N. Bezdenejnykh, A. Farrahi, P. Barthol, and R. Meller*, Thermal control of SUNRISE, a balloon-borne solar telescope, *J. Aerosp. Eng.*, 225(G9), 1037–1049, doi:10.1177/0954410011401711, 2011.
- Peter, H., L. Abbo, V. Andretta, F. Auchère, A. Bemporad, F. Berrilli, V. Bommier, A. Braukhane, R. Casini, W. Curdt, J. Davila, H. Dittus, S. Fineschi, A. Fludra, A. Gendorfer, D. Griffin, B. Inhester, A. Lagg, E. Landi Degl'Innocenti, V. Maiwald, R. Manso Sainz, V. Martínez Pillet, S. Matthews, D. Moses, S. Parenti, A. Pietarila, D. Quantius, N.-E. Raouafi, J. Raymond, P. Rochus, O. Romberg, M. Schlotterer, U. Schühle, S. Solanki, D. Spadaro, L. Teriaca, S. Tomczyk, J. Trujillo Bueno, and J.-C. Vial*, Solar magnetism eXplorer (SolmeX), *Experimental Astronomy*, 33, 271–303, doi:10.1007/s10686-011-9271-0, 2011.
- Pietarila, A., R. Aznar Cuadrado, J. Hirzberger, and S. K. Solanki*, Kink Waves in an Active Region Dynamic Fibril, *Astrophys. J.*, 739(2), 92, doi:10.1088/0004-637X/739/2/92, 2011.
- Pietarila, A., R. H. Cameron, S. Danilovic, and S. K. Solanki*, Transport of Magnetic Flux from the Canopy to the Internetwork, *Astrophys. J.*, 729, 136, doi:10.1088/0004-637X/729/2/136, 2011.
- Pietarila Graham, J., D. D. Holm, P. Mininni, and A. Pouquet*, The effect of subfilter-scale physics on regularization models, *J. Sci. Comput.*, 49, 21–34, doi:10.1007/s10915-010-9428-4, 2011.
- Pietarila Graham, J., P. D. Mininni, and A. Pouquet*, High Reynolds number magnetohydrodynamic turbulence using a Lagrangian model, *Phys. Rev. E*, 84(1), 016314, doi:10.1103/PhysRevE.84.016314, 2011.
- Pike, W. T., U. Staufer, M. H. Hecht, W. Goetz, H. Parrat, S. Syskulska-Lawrence, S. Vijendran, and M. B. Madsen*, Quantification of the Dry History of the Matrian Soil Inferred from In-Situ Microscopy, *Geophys. Res. Lett.*, 38, L24201, doi:10.1029/2011GL049896, 2011.
- Plaschke F. and K.-H. Glassmeier*, Properties of standing Kruskal-Schwarzschild-modes at the magnetopause, *Ann. Geophys.*, 29(10), 1793–1807, doi:10.5194/angeo-29-1793-2011, 2011.
- Postberg, F., E. Grün, M. Horanyi, S. Kempf, H. Krüger, R. Srama, Z. Sternovsky, and M. Trieloff*, Compositional mapping of planetary moons by mass spectrometry of dust ejecta, *Planet. Space Sci.*, 59, 1815–1825, doi:10.1016/j.pss.2011.05.001, 2011.
- Püschel, M. J., F. Jenko, D. Told, and J. Büchner*, Gyrokinetic simulations of magnetic reconnection, *Phys. Plasmas*, 18, 112102, doi:10.1063/1.3656965, 2011.
- Ravindra, B., P. Venkatakrishnan, S. K. Tiwari, and R. Bhattacharyya*, Evolution of Currents of Opposite Signs in the Flare-productive Solar Active Region NOAA 10930, *Astrophys. J.*, 740, 19, doi:10.1088/0004-637X/740/1/19, 2011.
- Raymond, C. A., R. Jaumann, A. Nathues, H. Sierks, T. Roatsch, F. Preusker, F. Scholten, R. W. Gaskell, L. Jorda, H.-U. Keller, M. T. Zuber, D. E. Smith, N. Mastrodemos, S. Mottola*, The Dawn Topography Investigation, *Space Sci. Rev.*, 163(1-4), 487-510, doi: 10.1007/s11214-011-9863-z, 2011
- Reddy, V. A. Nathues, and M. J. Gaffey*, First fragment of Asteroid 4 Vesta's mantle detected, *Icarus*, 212(1), 175–179, doi:10.1016/j.icarus.2010.11.032, 2011.

Reddy, V., A. Nathues, M. J. Gaffey, and S. Schaeff, Mineralogical characterization of potential targets for the ASTEX mission scenario, *Planet. Space Sci.*, 59(8), 772–778, doi:10.1016/j.pss.2011.03.005, 2011.

Rengel, M., H. Sagawa, and P. Hartogh, New sub-millimeter heterodyne observations of CO and HCN in Titan's atmosphere with the APEX Swedish Heterodyne Facility Instrument, *Advances in Geosciences*, 25, 173–186, 2011.

Rengel, M., H. Sagawa, and P. Hartogh, Retrieval Simulations of Atmospheric Gases from Herschel observations of Titan, in: *Advances in Geosciences* (edited by A. Bhardwaj, S. A. Haider, P. Hartogh, W.-H. Ip, T. Ito, Y. Kasaba, G. M. Muños Cara, and C. Y. R. Wu), vol. 19, pp. 335–348, World Scientific Publishing Co., Singapore, 2011.

Ricci, D., J. Poels, A. Elyiv, F. Finet, P. G. Spirmont, T. Anguita, V. Bozza, P. Browne, M. Burgdorf, S. C. Novati, M. Dominik, S. Dreizler, M. Glitrup, F. Grundahl, K. Harpsoe, F. Hessman, T. C. Hinse, A. Hornstrup, M. Hundertmark, U. G. Jorgensen, C. Liebig, G. Maier, L. Mancini, G. Masi, M. Mathiasen, S. Rahvar, G. Scarpetta, J. Skottfelt, C. Snodgrass, J. Southworth, J. Teuber, C. C. Thone, J. Wambsganss, F. Zimmer, M. Zub, and J. Surdej, Flux and color variations of the quadruply imaged quasar HE 0435-1223, *Astron. & Astrophys.*, 528, A42, doi:10.1051/0004-6361/201016188, 2011.

Rockmann, T., M. Brass, R. Borchers, A. Engel, The isotopic composition of methane in the stratosphere: high-altitude balloon sample measurements, *Atmospheric chemistry and physics*, 11(24), 13287-13304, doi: 10.5194/acp-11-13287-2011, 2011.

Röhrbein, D., R. Cameron, and M. Schüssler, Is there a non-monotonic relation between photospheric brightness and magnetic field strength?, *Astron. & Astrophys.*, 532, A140, doi:10.1051/0004-6361/201117090, 2011.

Roussos, E., N. Krupp, C. P. Paranicas, P. Kollmann, D. G. Mitchell, S. M. Krimigis, T. P. Armstrong, D. R. Went, M. K. Dougherty, and G. H. Jones, Long- and short-term variability of Saturn's ionic radiation belts, *J. Geophys. Res.*, 116, A02217, doi:10.1029/2010JA015954, 2011.

Ruiz, M. E., S. Dasso, W. H. Matthaeus, E. Marsch, and J. M. Weigand, Aging of anisotropy of solar wind magnetic fluctuations in the inner heliosphere, *J. Geophys. Res.*, 116, A10102, doi:10.1029/2011JA016697, 2011.

Santos, J. C., J. Büchner, and A. Otto, 3D MHD simulations of electric current development in a rotating sunspot: Active region NOAA 8210, *Astron. & Astrophys.*, 535, A111, doi:10.1051/0004-6361/201116792, 2011.

Santos, J. C., J. Büchner, and A. Otto, Development of electric currents in a magnetic field configuration containing a magnetic null point, *Astron. & Astrophys.*, 525, A3, doi:10.1051/0004-6361/201014758, 2011.

Sasso, C., A. Lagg, and S. K. Solanki, Multicomponent He I 10830 Å profiles in an active filament, *Astron. & Astrophys.*, 526, A42, doi:10.1051/0004-6361/200912956, 2011.

Savin, S., V. Budaev, L. Zelenyi, E. Amata, D. Sibeck, V. Lutsenko, N. Borodkova, H. Zhang, V. Angelopoulos, J. Safrankova, Z. Nemecek, J. Blecki, J. Büchner, L. Kozak, S. Romanov, A. Skalsky, and V. Krasnoselsky, Anomalous interaction of a plasma flow with the boundary layers of a geomagnetic trap, *JETP Lett.*, 93, 754–762, doi:10.1134/S0021364011120137, 2011.

Savin, S., L. Zelenyi, E. Amata, V. Budaev, J. Büchner, J. Blecki, M. Balikhin, S. Klimov, V. E. Korepanov, L. Kozak, V. Kudryashov, V. Kunitsyn, L. Lezhen, A. V. Milovanov, Z. Nemecek, I. Nesterov, D. Novikov, E. Panov, J. L. Rauch, H. Rothkaehl, S. Romanov, J. Safrankova, A. Skalsky, and M. Veselov, ROY - A multiscale magnetospheric mission, *Planet. Space Sci.*, 59, 606–617, doi:10.1016/j.pss.2010.05.001, 2011.

- Schindler, K., C. A. Thomas, V. Reddy, A. Weber, S. Gruska, and S. Fasoulas,** PANIC — A surface science package for the in situ characterization of a near-Earth asteroid, *Acta Astronautica*, 68(11–12), 1800–1810, doi:10.1016/j.actaastro.2011.01.012, 2011.
- Schippers, P., C. S. Arridge, J. D. Menietti, D. A. Gurnett, L. Lamy, B. Cecconi, D. G. Mitchell, N. André, W. S. Kurth, S. Grimald, M. K. Dougherty, A. J. Coates, N. Krupp, and D. T. Young,** Auroral electron distributions within and close to the Saturn kilometric radiation source region, *J. Geophys. Res.*, 116, A05203, doi:10.1029/2011JA016461, 2011.
- Schmidt, G. A., J. H. Jungclaus, C. M. Ammann, E. Bard, P. Braconnot, T. J. Crowley, G. Delygue, F. Joos, N. A. Krivova, R. Muscheler, B. L. Otto-Bliesner, J. Pongratz, D. T. Shindell, S. K. Solanki, F. Steinhilber, and L. E. A. Vieira,** Climate Forcing Reconstruction for Use in PMIP Simulations of the Last Millennium, (v1.0), *Geosci. Model Dev.*, 4, 33–45, doi:10.5194/gmd-4-33-2011, 2011.
- Schnerr, R. S., J. d. I. C. Rodriguez, and M. van Noort,** Stokes imaging polarimetry using image restoration: a calibration strategy for Fabry-Perot based instruments, *Astron. & Astrophys.*, 534, A45, doi:10.1051/0004-6361/201016000, 2011.
- Schrinner, M., D. Schmitt, and P. Hoyng,** Mode analysis of numerical geodynamo models, *Phys. Earth Planet. Inter.*, 188, 185–193, doi:10.1016/j.pepi.2011.07.005, 2011.
- Schunker H. and D. C. Braun,** Newly identified properties of surface acoustic power, *Solar Phys.*, 268, 349–362, doi:10.1007/s11207-010-9550-3, 2011.
- Schunker, H., R. H. Cameron, L. Gizon, and H. Moradi,** Constructing and Characterising Solar Structure Models for Computational Helioseismology, *Solar Phys.*, 271(1-2), 1–26, doi:10.1007/s11207-011-9790-x, 2011.
- Seleznyov, A. D., S. K. Solanki, and N. A. Krivova,** Modelling solar irradiance variability on time scales from minutes to months, *Astron. & Astrophys.*, 532, A108, doi:10.1051/0004-6361/200811138, 2011.
- Selwa, M., L. Ofmann, and S. K. Solanki,** The Role of Active Region Loop Geometry. I. How can it Affect Coronal Seismology?, *Astrophys. J.*, 726, 42–51, doi:10.1088/0004-637X/726/1/42, 2011.
- Selwa, M., S. K. Solanki, and L. Ofmann,** The Role of Active Region Loop Geometry. II. Symmetry Breaking in Three-Dimensional Active Region: Why are Vertical Kink Oscillations Observed so Rarely?, *Astrophys. J.*, 728, 87, doi:10.1088/0004-637X/728/2/87, 2011.
- Sergis, N., C. S. Arridge, S. M. Krimigis, D. G. Mitchell, A. M. Rymer, D. C. Hamilton, N. Krupp, M. K. Dougherty, and A. J. Coates,** Dynamics and seasonal variations in Saturn's magnetospheric plasma sheet, as measured by Cassini, *J. Geophys. Res.*, 116, A04203, doi:10.1029/2010JA016180, 2011.
- Shin, I.-G., A. Udalski, C. Han, A. Gould, M. Dominik, P. Fouque, M. Kubiak, M. K. Szymanski, G. Pietrzynki, I. Soszynski, K. Ulaczyk, L. Wyrzykowski, D. L. DePoy, S. Dong, B. S. Gaudi, C.-U. Lee, B.-G. Park, R. W. Pogge, M. D. Albrow, A. Allan, J. P. Beaulieu, D. P. Bennett, M. Bode, D. M. Bramich, S. Brillant, M. Burgdorf, H. Calitz, A. Cassan, K. H. Cook, E. Corrales, C. Coutures, N. Desort, S. Dieters, D. D. Prester, J. Donatowicz, S. N. Fraser, J. Greenhill, K. Hill, M. Hoffman, K. Horne, U. G. Jorgensen, S. R. Kane, D. Kubas, J. B. Marquette, R. Martin, P. Meintjes, J. Menzies, C. Mottram, T. Naylor, K. R. Pollard, K. C. Sahu, C. Snodgrass, I. Steele, C. Vinter, J. Wambsganss, A. Williams, K. Woller, and The OGLE Collaboration,** OGLE-2005-BLG-018: Characterization of Full Physical and Orbital Parameters of a Gravitational Binary Lens, *Astrophys. J.*, 735(2), 85, doi:10.1088/0004-637X/735/2/85, 2011.
- Sierks, H., H. U. Keller, R. Jaumann, H. Michalik, T. Behnke, F. Bubenhangen, I. Büttner, U. Carsentry, U. Christensen, R. Enge, B. Fiethe, P. Gutiérrez Marqués, H. Hartwig, H. Krüger, W. Kühne, T. Maue, S. Mottola, A. Nathues, K.-U. Reiche, M. L. Richards, T. Roatsch, S. E. Schröder, I. Szemerey, and M. Tschentscher,** The Dawn Framing Camera, *Space Sci. Rev.*, 163, 263–327, doi:10.1007/s11214-011-9745-4, 2011.

- Sierks, H., P. Lamy, C. Barbieri, D. Koschny, H. Rickman, R. Rodrigo, M. F. A'Hearn, F. Angrilli, M. A. Barucci, J.-L. Bertaux, I. Bertini, S. Besse, B. Carry, G. Cremonese, V. Da Deppo, B. Davidsson, S. Debei, M. De Cecco, J. De Leon, F. Ferri, S. Fornasier, M. Fulle, S. F. Hviid, R. W. Gaskell, O. Groussin, P. Gutierrez, W. Ip, L. Jordá, M. Kaasalainen, H. U. Keller, J. Knollenberg, R. Kramm, E. Kuehrt, M. Kueppers, L. Lara, M. Lazzarin, C. Leyrat, J. J. Lopez Moreno, S. Magrin, S. Marchi, F. Marzari, M. Massironi, H. Michalik, R. Moissl, G. Naletto, F. Preusker, L. Sabau, W. Sabolo, F. Scholten, C. Snodgrass, N. Thomas, C. Tubiana, P. Vernazza, J.-B. Vincent, K.-P. Wenzel, T. Andert, M. Paetzold, and B. P. Weiss**, Images of Asteroid 21 Lutetia: A Remnant Planetesimal from the Early Solar System, *Science*, 334(6055), 487–490, doi:10.1126/science.1207325, 2011.
- Singh, J., S. S. Hasan, G. R. Gupta, K. Nagaraju, and D. Banerjee**, Spectroscopic Observation of Oscillations in the Corona During the Total Solar Eclipse of 22 July 2009, *Solar Phys.*, 270(1), 213–233, doi:10.1007/s11207-011-9732-7, 2011.
- Skorov, Y. V., R. van Lieshout, J. Blum, and H. U. Keller**, Activity of comets: Gas transport in the near-surface porous layers of a cometary nucleus, *Icarus*, 212(2), 867–876, doi:10.1016/j.icarus.2011.01.018, 2011.
- Skowron, J., A. Udalski, A. Gould, S. Dong, L. A. G. Monard, C. Han, C. R. Nelson, J. McCormick, D. Moorhouse, G. Thornley, A. Maury, D. M. Bramich, J. Greenhill, S. Kozłowski, I. Bond, R. Poleski, L. Wyrzykowski, K. Ulaczyk, M. Kubiak, M. K. Szymanski, G. Pietrzynski, I. Soszynski, B. S. Gaudi, J. C. Yee, L.-W. Hung, R. W. Pogge, D. L. Depoy, C.-U. Lee, B.-G. Park, W. Allen, F. Mallia, J. Drummond, G. Bolt, A. Allan, P. Browne, N. Clay, M. Dominik, S. Fraser, K. Horne, N. Kains, C. Mottram, C. Snodgrass, I. Steele, R. A. Street, Y. Tsapras, F. Abe, D. P. Bennett, C. S. Botzler, D. Douchin, M. Freeman, A. Fukui, K. Furusawa, F. Hayashi, J. B. Hearnshaw, S. Hosaka, Y. Itow, K. Kamiya, P. M. Kilmartin, A. Korpela, W. Lin, C. H. Ling, S. Makita, K. Masuda, Y. Matsubara, Y. Muraki, T. Nagayama, N. Miyake, K. Nishimoto, K. Ohnishi, Y. C. Perrott, N. Rattenbury, T. Saito, L. Skuljan, D. J. Sullivan, T. Sumi, D. Suzuki, W. L. Sweatman, P. J. Tristram, K. Wada, P. C. M. Yock, J.-P. Beaulieu, P. Fouque, M. D. Albrow, V. Batista, S. Brillant, J. A. R. Caldwell, A. Cassan, A. Cole, K. H. Cook, C. Coutures, S. Dieters, D. D. Prester, J. Donatowicz, S. R. Kane, D. Kubas, J.-B. Marquette, R. Martin, J. Menzies, K. C. Sahu, J. Wambsganss, A. Williams, M. Zub, and The Ogle Collaboration**, Binary Microlensing Event Ogle-2009-BLG-020 Gives Verifiable Mass, Distance, and Orbit Predictions, *Astrophys. J.*, 738(1), 87, doi:10.1088/0004-637X/738/1/87, 2011.
- Snodgrass, C., A. Fitzsimmons, S. C. Lowry, and P. Weissman**, The size distribution of Jupiter Family comet nuclei, *Mon. Not. Roy. Astron. Soc.*, 414(1), 458–469, doi:10.1111/j.1365-2966.2011.18406.x, 2011.
- Solanki S. K. and N. A. Krivova**, Analyzing Solar Cycles, *Science*, 334(6058), 916–917, doi:10.1126/science.1212555, 2011.
- Song P. and V. M. Vasyliūnas**, Heating of the solar atmosphere by strong damping of Alfvén waves, *J. Geophys. Res.*, 116, A09104, doi:10.1029/2011JA016679, 2011.
- Southworth, J., M. Dominik, U. G. Jorgensen, S. Rahvar, C. Snodgrass, K. Alsubai, V. Bozza, P. Browne, M. Burgdorf, S. C. Novati, P. Dodds, S. Dreizler, F. Finet, T. Gerner, S. Hardis, K. Harpsøe, C. Hellier, T. C. Hinse, M. Hundertmark, N. Kains, E. Kerins, C. Liebig, L. Mancini, M. Mathiasen, M. T. Penny, S. Proft, D. Ricci, K. Sahu, G. Scarpetta, S. Schaefer, F. Schoenebeck, and J. Surdej**, A much lower density for the transiting extrasolar planet WASP-7, *Astron. & Astrophys.*, 527, A8, doi:10.1051/0004-6361/201016183, 2011.
- Srama, R., S. Kempf, G. Moragas-Kostermeyer, N. Altobelli, S. Auer, U. Beckmann, S. Bugiel, M. Burton, T. Economou, H. Fechtig, K. Fiege, S. F. Green, M. Grande, O. Havnes, J. K. Hillier, S. Helfert, M. Horanyi, S. Hsu, I. Eduard, E. K. Jessberger, T. V. Johnson, E. Khalisi, H. Krüger, G. Matt, A. Mocke, P. Lamy, G. Linkert, F. Lura, D. Möhlmann, G. E. Morfill, K. Otto, F. Postberg, M. Roy, S. Jürgen, G. H. Schwemh, F. Spahn, V. Sterken, J. Svestka, V. Tschernjawska, E. Grün, and H.-P. Röser**,

- The cosmic dust analyser onboard cassini: Ten years of discoveries, CEAS Space Journal, 2, 3–16, doi:10.1007/s12567-011-0014-x, 2011.
- Stenborg, G., E. Marsch, A. Vourlidas, R. Howard, and K. Baldwin*, A novel technique to measure intensity fluctuations in EUV images and to detect coronal sound waves nearby active regions, Astron. & Astrophys., 526, A58, doi:10.1051/0004-6361/201014369, 2011.
- Straub, C., N. Kämpfer, S. H. W. Golchert, G. Hochschild, K. Hallgren, and P. Hartogh*, ARIS-Campaign: intercomparison of three ground based 22 GHz radiometers for middle atmospheric water vapor at the Zugspitze in winter 2009, Atmospheric Measurement Techniques, 4, 1979–1994, doi:10.5194/amt-4-1979-2011, 2011.
- Straub, C., A. Murk, N. Kämpfer, S. H. W. Golchert, G. Hochschild, K. Hallgren, and P. Hartogh*, ARIS-Campaign: intercomparison of three ground based 22 GHz radiometers for middle atmospheric water vapor at the Zugspitze in winter 2009, Atmospheric Measurement Techniques Discussions, 4(3), 3359–3400, doi:10.5194/amtd-4-3359-2011, 2011.
- Švanda, M., L. Gizon, S. M. Hanasoge**, and S. D. Ustyugov, Validated helioseismic inversions for 3D vector flows, Astron. & Astrophys., 530, A148, doi:10.1051/0004-6361/201016426, 2011.
- Tadesse, T., T. Wiegelm**ann, B. Inhester, and A. Pevtsov, Nonlinear force-free field extrapolation in spherical geometry: improved boundary data treatment applied to a SOLIS/VSM vector magnetogram, Astron. & Astrophys., 527, A30, doi:10.1051/0004-6361/201015491, 2011.
- Takahashi, K., K.-H. Glassmeier, V. Angelopoulos, J. Bonnell, Y. Nishimura, H. J. Singer, and C. T. Russell**, Multisatellite observations of a giant pulsation event, J. Geophys. Res., 116, A11223, doi:10.1029/2011JA016955, 2011.
- Teh, W.-L., B. U. O. Sonnerup, G. Paschmann, and S. E. Haaland**, Local structure of directional discontinuities in the solar wind, J. Geophys. Res., 116, A04105, doi:10.1029/2010JA016152, 2011.
- Teriaca, L., V. Andretta, F. Auchère, C. M. Brown, E. Buchlin, G. Cauzzi, J. L. Culhane, W. Curdt, J. M. Davila, G. Del Zanna, G. A. Doschek, S. Fineschi, A. Fludra, P. T. Gallagher, L. Green, L. K. Harra, S. Imada, D. Innes, B. Kliem, C. Korendyke, J. T. Mariska, V. Martínez-Pillet, S. Parenti, S. Patsourakos, H. Peter, L. Poletto, R. J. Rutten, U. Schühle, M. Siemer, T. Shimizu, H. Socas-Navarro, S. K. Solanki, D. Spadaro, J. Trujillo-Bueno, S. Tsuneta, S. V. Dominguez, J.-C. Vial, R. Walsh, H. P. Warren, T. Wiegelm**ann, B. Winter, and P. Young, LEMUR: Large European module for solar Ultraviolet Research. European contribution to JAXA's Solar-C mission., Experimental Astronomy, doi:10.1007/s10686-011-9274-x, 2011.
- Thalmann, J. K., B. Inhester, and T. Wiegelm**ann, Estimating the Relative Helicity of Coronal Magnetic Fields, Solar Phys., 272, 243–255, doi:10.1007/s11207-011-9826-2, 2011.
- Tothova, D., D. E. Innes, and G. Stenborg**, Oscillations in the wake of a flare blast wave, Astron. & Astrophys., 528, L12, doi:10.1051/0004-6361/201015272, 2011.
- Tozzi, G. P., P. Patriarchi, H. Boehnhardt, J.-B. Vincent, J. Licandro, L. Kolokolova, R. Schulz, and J. Stüwe**, Evolution of the dust coma in comet 67P/Churyumov-Gerasimenko before the 2009 perihelion, Astron. & Astrophys., 531, A54, doi:10.1051/0004-6361/201116577, 2011.
- Trattner, K. J., S. M. Petrinec, S. A. Fuselier, K. Nykyri, and E. Kronberg**, Cluster observations of bow shock energetic ion transport through the magnetosheath into the cusp, J. Geophys. Res., 116, A09207, doi:10.1029/2011JA016617, 2011.
- Tu, J., P. Song, and V. M. Vasyliūnas**, Ionosphere/thermosphere heating determined from dynamic magnetosphere-ionosphere/thermosphere coupling, J. Geophys. Res., 116, A09311, doi:10.1029/2011JA016620, 2011.

Tubiana, C., H. Böhnhardt, J. Agarwal, M. Drahus, L. Barrera, and J. L. Ortiz, 67P/Churyumov-Gerasimenko at large heliocentric distance, *Astron. & Astrophys.*, 527, A113, doi:10.1051/0004-6361/201016027, 2011.

Turner, D. L., S. Eriksson, T. D. Phan, V. Angelopoulos, W. Tu, W. Liu, X. Li, W.-L. Teh, J. P. McFadden, and K.-H. Glassmeier, Multispacecraft observations of a foreshock-induced magnetopause disturbance exhibiting distinct plasma flows and an intense density compression, *J. Geophys. Res.*, 116, A04230, doi:10.1029/2010JA015668, 2011.

Usoskin I. and N. Krivova, Climate and Weather of the Sun-Earth System, in *Astronomy and Astrophysics*, in: Encyclopedia of Life Support Systems (EOLSS) (edited by O. Engvold, R. Stabell, B. Czerny, and J. Lattanzio), Eolss Publishers, Oxford, UK, 2011, developed under the Auspices of the UNESCO.

Vaivads, A., G. Andersson, S. D. Bale, C. M. Cully, J. D. Keyser, M. Fujimoto, S. Grahn, S. Haaland, H. Ji, Yu. V. Khotyaintsev, A. Lazarian, B. Lavraud, I. R. Mann, R. Nakamura, T. K. M. Nakamura, Y. Narita, A. Retinò, F. Sahraoui, A. Schekochihin, S. J. Schwartz, I. Shinohara, and L. Sorriso-Valvo, EIDOSCOPE: particle acceleration at plasma boundaries, *Experimental Astronomy*, 33, 491–527, doi:10.1007/s10686-011-9233-6, 2011.

Varmuza, K., C. Engrand, P. Filzmoser, M. Hilchenbach, J. Kissel, H. Krüger, J. Silén, and M. Trieloff, Random projection for dimensionality reductionApplied to time-of-flight secondary ion mass spectrometry data, *Analytica Chimica Acta*, 705, 48–55, doi:10.1016/j.aca.2011.03.031, 2011.

Vasyliūnas, V. M., Physics of magnetospheric variability, *Space Sci. Rev.*, 158, 91–118, doi:10.1007/s11214-010-9696-1, 2011.

Vasyliūnas, V. M., The largest imaginable magnetic storm, *J. Atmos. Solar-Terr. Phys.*, 73, 1444–1446, doi:10.1016/j.jastp.2010.05.012, 2011.

Verscharen D. and E. Marsch, Apparent temperature anisotropies due to wave activity in the solar wind, *Ann. Geophys.*, 29, 909–917, doi:10.5194/angeo-29-909-2011, 2011.

Verscharen D. and E. Marsch, Compressive high-frequency waves riding on an Alfvén/ion-cyclotron wave in a multi-fluid plasma, *J. Plasma Phys.*, 77, 693–707, doi:10.1017/S0022377811000080, 2011.

Vieria, L. E. A., S. K. Solanki, N. A. Krivova, and I. Usoskin, Evolution of the Solar Irradiance during the Holocene, *Astron. & Astrophys.*, 531, A6, doi:10.1051/0004-6361/201015843, 2011.

Vogt, J., S. Haaland, and G. Paschmann, Accuracy of multi-point boundary crossing time analysis, *Ann. Geophys.*, 29, 2239–2252, doi:10.5194/angeo-29-2239-2011, 2011.

Wiehle, S., U. Motschmann, N. Gortsas, K.-H. Glassmeier, J. Müller, and C. Koenders, Simulation of cometary jets in interaction with the solar wind, *Adv. Space Res.*, 48(6), 1108–1113, doi:10.1016/j.asr.2011.05.024, 2011.

Wiehle, S., F. Plaschke, U. Motschmann, K.-H. Glassmeier, H. U. Auster, V. Angelopoulos, J. Mueller, H. Kriegel, E. Georgescu, J. Halekas, D. G. Sibeck, and J. P. McFadden, First lunar wake passage of ARTEMIS: Discrimination of wake effects and solar wind fluctuations by 3D hybrid simulations, *Planet. Space Sci.*, 59(8), 661–671, doi:10.1016/j.pss.2011.01.012, 2011.

Wilhelm, K., L. Abbo, F. Auchere, N. Barbey, L. Feng, A. H. Gabriel, S. Giordano, S. Imada, A. Llebaria, W. H. Matthaeus, G. Poletto, N.-E. Raouafi, S. T. Suess, L. Teriaca, and Y.-M. Wang, Morphology, dynamics and plasma parameters of plumes and inter-plume regions in solar coronal holes, *Astron. Astrophys. Rev.*, 19, 35, doi:10.1007/s00159-011-0035-7, 2011.

Wilhelm K. and B. N. Dwivedi, An explanation of the Pioneer anomaly involving accelerated atomic clocks, *Astrophysics and Space Sciences Transactions*, 7, 487–494, doi:10.5194/asta-7-487-2011, 2011.

- Williams, A. O., N. J. T. Edberg, S. E. Milan, M. Lester, **M. Fränz**, and J. A. Davies, Tracking corotating interaction regions from the Sun through to the orbit of Mars using ACE, MEX, VEX, and STEREO, *J. Geophys. Res.*, 116, A08103, doi:10.1029/2010JA015719, 2011.
- Wolters, S. D., B. Rozitis, S. R. Duddy, S. C. Lowry, S. F. Green, **C. Snodgrass**, O. R. Hainaut, P. Weissman, Physical characterization of low delta-V asteroid (175706) 1996 FG3, *Mon. Not. R. Astron. Soc.*, 418, 1246-1257, doi: 10.1111/j.1365-2966.2011.19575.x, 2011.
- Xiong, B., W. Wan, L. Liu, P. Withers, B. Zhao, B. Ning, **Y. Wei**, H. Le, Z. Ren, Y. Chen, M. He, and J. Liu, Ionospheric response to the X-class solar flare on 7 September 2005, *J. Geophys. Res.*, 116, A11317, doi:10.1029/2011JA016961, 2011.
- Yamauchi, M., Y. Futaana, A. Fedorov, R. Frahm, J. Winningham, **E. Dubinin**, R. Lundin, S. Barabash, M. Hölmstrom, C. Mazelle, J.-A. Savaud, T.-L. Zhang, W. Baumjohann, A. Coates, and **M. Fraenz**, Comparison of accelerating ion populations observed upstream of the bow shocks at Venus and Mars, *Ann. Geophys.*, 29, 511–528, doi:10.5194/angeo-29-511-2011, 2011.
- Yang, B., Q.-G. Zong, S. Y. Fu, X. Li, **A. Korth**, H. S. Fu, C. Yue, and H. Rème, The role of ULF waves interacting with oxygen ions at the outer ring current during storm times, *J. Geophys. Res.*, 116, A01203, doi:10.1029/2010JA015683, 2011.
- Yao, S., J.-S. He, **E. Marsch**, C.-Y. Tu, A. Pedersen, H. Rème, and J. G. Trotignon, Multi-scale anti-correlation between electron density and magnetic field strength in the solar wind, *Astrophys. J.*, 728, 146, doi:10.1088/0004-637X/728/2/146, 2011.
- Yelles Chaouche, L., F. Moreno-Insertis, V. Martínez Pillet, **T. Wiegelmann**, J. A. Bonet, M. Knölker, L. R. Bellot Rubio, J. C. del Toro Iniesta, **P. Barthol**, **A. Gandorfer**, W. Schmidt, and **S. K. Solanki**, Mesogranulation and the Solar Surface Magnetic Field Distribution, *Astrophys. J.*, 727, L30, doi:10.1088/2041-8205/727/2/L30, 2011.
- Yiğit, E., **A. S. Medvedev**, A. D. Aylward, A. J. Ridley, M. J. Harris, M. B. Moldwin, and **P. Hartogh**, Dynamical effects of internal gravity waves in the equinoctial thermosphere, *J. Atmos. Solar-Terr. Phys.*, doi:10.1016/j.jastp.2011.11.014, 2011.
- Zacharias, P., **H. Peter**, and **S. Bingert**, Ejection of cool plasma into the hot corona, *Astron. & Astrophys.*, 532, A112, doi:10.1051/0004-6361/201116708, 2011.
- Zacharias, P., **H. Peter**, and **S. Bingert**, Investigation of mass flows in the transition region and corona in a three-dimensional numerical model approach, *Astron. & Astrophys.*, 531, A97, doi:10.1051/0004-6361/201016047, 2011.
- Zhang Z. and **E. Nielsen**, Using complex independent component analysis to extract weak returns in MARSIS radar data and their possible relation to a subsurface reflector on Mars, *Radio Sci.*, 46, RS1007, doi:10.1029/2010RS004426, 2011.
- Žlebčík, R., **M. Švanda**, and M. Klvana, Space-time segmentation method for study of the vertical structure and evolution of solar supergranulation from data provided by local helioseismology, *New Astron.*, 16(1), 1–5, doi:10.1016/j.newast.2010.06.002, 2011.
- Zou, H., R. J. Lillis, J. S. Wang, and **E. Nielsen**, Determination of seasonal variations in the Martian neutral atmosphere from observations of ionospheric peak height, *J. Geophys. Res.*, 116, E09004, doi:10.1029/2011JE003833, 2011.

3.2 Doktorarbeiten / *PhD theses*

- A. Angsmann**, Magnetic states of the ionosphere of Venus observed by Venus Express, Doktorarbeit, Techn. Univ. Carolo-Wilhelmina Braunschweig, Berlin, 2011.
- J. de Patoul**, Stereoscopy and tomography of coronal structures, Doktorarbeit, Techn. Univ. Carolo-Wilhelmina, Braunschweig, Berlin, 2011.
- M. R. El Maarry**, Searching for Hydrothermal Systems on Mars using Remote Sensing, Doktorarbeit, Georg-August-Universität Göttingen, Berlin, 2011.
- M. D. Espuig**, Solar variability: A new proxy and models of solar irradiance variations, Doktorarbeit, Techn. Univ. Carolo-Wilhelmina, Braunschweig, Berlin, 2011.
- K. Hallgren**, Mesospheric water vapor — Variability at different timescales observed by ground-based microwave spectroscopy, Doktorarbeit, Mathematisch-Naturwiss. Fak. Univ., at Rostock, Berlin, 2011.
- S. Javadi**, Numerical simulation of the heating of x-ray bright points in the solar corona, Doktorarbeit, Georg-August-Universität Göttingen, Berlin, 2011.
- A. L. Müller**, Energetic particle injection events in the Kronian magnetosphere: applications and properties, Doktorarbeit, Mathematisch-Naturwiss. Fak. Univ., zu Köln, uni-edition gmbh, 2011.
- N. Oklay**, Spectropolarimetric investigations of the deep photospheric layers of solar magnetic structurex, Doktorarbeit, Georg-August-Universität Göttingen, Berlin, 2011.
- T. Stahn**, Analysis of time series of solar-like oscillations - Applications to the Sun and HD 52265, Doktorarbeit, Georg-August-Universität Göttingen, uni-edition Berlin, 2011.
- T. Tadesse Asfaw**, Nonlinear force-free reconstruction of the coronal magnetic field with advanced numerical methods, Doktorarbeit, Georg-August-Universität Göttingen, Berlin, 2011.

4. Vorträge und Poster / *Talks and posters*

(fett gedruckt: zu MPS gehörig */bold: affiliated to MPS*)
(unterstrichen: Vortragende / *underline: presenter*)

E. Adamson and **J. Büchner**, Parallel Execution of the Linmod3D Solar MHD simulation code on an Altix 4700, 4th International Solaire Network Meeting "Magnetic field emergence, linkage, reconnection, and eruptions in the solar atmosphere", Teistungen, May 9-13, 2011. (Poster).

H. Amit, **U. R. Christensen**, and **B. Langlais**, The influence of degree-1 mantle heterogeneity on the past dynamo of Mars, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

M. Andriopoulou, **E. Roussos**, **N. Krupp**, **P. Kollmann**, **Z. Bebesi**, **C. Paranicas**, and **M. Thomsen**, A statistical study of the energetic electron microsignatures from Tethys and Dione, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

M. Andriopoulou, **E. Roussos**, **N. Krupp**, **P. Kollmann**, **Z. Bebesi**, **C. Paranicas**, and **M. Thomsen**, Energetic electron microsignatures from Dione and Tethys: an updated catalogue and preliminary analysis, Cassini/MAPS Workshop, Annapolis, April 27-29, 2011. (Poster).

M. Andriopoulou, **E. Roussos**, **N. Krupp**, **P. Kollmann**, **Z. Bebesi**, **C. Paranicas**, **M. Thomsen**, and **M. Dougherty**, An updated catalogue and analysis of energetic electron microsignatures from Dione and Tethys observed with the MIMI/LEMMS detector, Cassini 54th PSG meeting, ESTEC, Noordwijk, June 15, 2011. (Oral).

A. Angsmann, **M. Fraenz**, **E. Dubinin**, **J. Woch**, **S. Barabash**, **T. Zhang**, and **U. Motschmann**, Magnetic states of the ionosphere of Venus, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

C. Arridge, **A. Coates**, **F. Crary**, **M. Dougherty**, **C. Forsyth**, **C. Jackman**, **T. Krimigis**, **N. Krupp**, **L. Lamy**, **E. Roussos**, **Sergis**, **J. Slavin**, and **A. Walsh**, Active Current Sheets in Saturn's Outer Magnetosphere, Magnetospheres of the Outer Planets 2011, Boston University, Boston, MA, USA, July 11-15, 2011. (Poster).

C. S. Arridge, **A. J. Co**, **F. J. Crary**, **M. K. Dougherty**, **C. Forsyth**, **C. M. Jackman**, **S. M. Krimigis**, **N. Krupp**, **L. Lamy**, **E. Roussos**, **N. Sergis**, **J. A. Slavin**, and **A. P. Walsh**, Active current sheets in Saturn's magnetosphere, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

M. Bártá, **J. Büchner**, and **M. Karlický**, Energy cascade in magnetic reconnection in solar flares: Modelling and observations, 478th Heraeus Seminar: FUSION AND ASTROPHYSICAL PLASMAS, Bad Honnef, April 18-20, 2011. (Oral).

M. Barta, **J. Büchner**, and **M. Karlický**, Energy cascades in magnetic reconnection in CME generated current sheets: Modelling and observations, 4th International Solaire Network Meeting "Magnetic field emergence, linkage, reconnection, and eruptions in the solar atmosphere", Teistungen, May 9-13, 2011. (Oral).

P. Barthol, Successful flight of the balloon-borne stratospheric solar observatory SUNRISE, 20th ESA Symposium on European Rocket and Balloon Programmes and Related Research, Hyères, France, May 22-26, 2011, invited. (Oral).

Z. Bebesi, **N. Krupp**, **K. Szego**, **G. Erdos**, **Z. Nemeth**, **D. G. Mitchell**, **S. M. Krimigis**, and **D. T. Young**, Energetic electron precipitation at Titan, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

W. Beisker, **K.-L. Bath**, **H.-J. Bode**, **A. Tegtmeier**, **C. Schnabel**, **R. Casas**, **J. Lecacheux**, **F. Colas**, **S. Kowollik**, **E. Bredner**, **C. P. Heidmann**, **B. Gaehrken**, **M. Dähne**, **H. Denzau**, **M. Mommert**, **E. Guenther**, **B. Stecklum**, **M. Rengel**, **M. Mugrauer**, **E. Vilenius**, **D. Herald**, **O. Farago**, **A. Eberle**,

H. Rutten, R. Behrend, S. Mottola, M. Assafin, F. Braga-Ribas, T. Widemann, and B. Sicardy,
Observations of Stellar Occultations by Dwarf Planets and TNOs - International Campaigns,
European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

M. Bhatt, U. Mall, and R. Bugiolacchi, Iron mapping method based on 2m absorption parameters
using SIR-2 data on-board Chandrayaan-1, European Planetary Science Congress 2011, Nantes,
France, October 2-7, 2011. (Oral).

M. Bhatt, U. Mall, R. Bugiolacchi, and B. Lehmann, Study of spectral characteristics of the central
peak region of Tycho crater using SIR-2 data on-board Chandrayaan-1, 42nd Lunar and Planetary
Science Conference, The Woodlands, Texas, USA, March 7-11, 2011. (Poster).

M. Bierwirth, Werkstoffuntersuchungen an Planetengetrieben für Weltraummissionen,
Forschungsseminar des Methodisch-Diagnostischen Zentrums Werkstoffprüfung e.V., Otto-von-
Guericke-Universität Magdeburg, April 1, 2011. (Oral).

S. Bingert and P. Bourdin, MHD codes in astrophysics, 71. Jahrestagung der DGG gemeinsam mit der
AEF, Köln, Germany, February 21-24, 2011, dGG/AEF Workshop "Numerische Methoden". (Oral).

S. Bingert and H. Peter, Coronal heating and dynamics in a 3D magneto-hydrodynamic model,
European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

S. Bingert and H. Peter, Scale Invariant Coronal Heating by (Nano-)Flares in a 3D MHD Model, 13th
European Solar Physics Meeting, Rhodes, Greece, September 12-16, 2011. (Oral).

N. Biver, D. Bockelée-Morvan, J. Crovisier, U. Frisk, A. Sanqvist, J. Boissier, P. Colom, M. de Val-Borro,
N. Dello Russo, P. Hartogh, H. G. Floren, A. Hjalmarson, T. Karlsson, H. Kawakita, A. Lecacheux,
S. Lundin, R. Moreno, H. L. Nordh, G. Paubert, R. Vervack, and H. Weaver, Molecular composition
and outgassing variability of 103P/Hartley 2 from mm and submm observations, EPSC-DPS Joint
Meeting 2011, Nantes, France, October 2-7, 2011. (Oral).

N. Biver, D. Bockelée-Morvan, D. C. Lis, J. Crovisier, U. Frisk, A. Sanqvist, J. Boissier, P. Colom,
M. de Val-Borro, N. D. Russo, P. Hartogh, H. G. Florén, Å. Hjalmarson, T. Karlsson, H. Kawakita,
A. Lecacheux, S. Lundin, R. Moreno, H. L. Nordh, G. Paubert, R. Vervack, H. Weaver, the Odin, and the Hsso Team, Molecular composition and outgassing variability of 103P/Hartley 2 from mm and
submm observations, European Planetary Science Congress 2011, Nantes, France, October 2-7,
2011. (Oral).

N. Biver, E. Lellouch, A. Sandqvist, U. Frisk, A. Lecacheux, D. Bockelée-Morvan, H. G. Floren,
P. Hartogh, A. Hjalmarson, C. Jarchow, T. Karlsson, S. Lundin, R. Moreno, and H. L. Nordh,
Observation of Saturn and the Enceladus water torus at 557GHz with Odin, EPSC-DPS Joint
Meeting 2011, Nantes, France, October 2-7, 2011. (Oral).

M. I. Blecka, T. Encrenaz, P. Hartogh, C. Jarchow, E. Lellouch, G. Sindoni, M. Rengel, and HssO team,
Observations of Carbon Monoxide in the Martian Atmosphere -the comparison of the
measurements done by PFS MEX, OMEGA MEX and HIFI on Herschel, European Planetary Science
Congress 2011, Nantes, France, October 2-7, 2011. (Poster).

M. I. Blecka, G. Sindoni, P. Hartogh, C. Jarchow, E. Lellouch, and the HssO team, Observations of
Carbon Monoxide in the Marian Atmosphere — the comparison of the measurements done by SW
PFSMEX and HIFI on Herschel in the period 11-16 of April 2010, European Geosciences Union
General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

D. Bockelée-Morvan, B. Swinyard, B. Vandenbussche, P. Hartogh, E. Jehin, D. Hutsemekers,
J. Manfroid, N. Biver, M. de Val-Borro, J. Crovisier, M. Küppers, M. Kidger, D. C. Lis, M. Rengel,
S. Szutowicz, and the HssO Team, Herschel PACS and SPIRE Observations of comet 103P/Hartley 2,
European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

H. Boehnhardt, Deep Impact, Stardust und Rosetta - Kometenforschung heute und in 5 Jahren, IAS
Annual Meeting, Zella, Oct. 8, 2011. (Oral).

H. Boehnhardt, Rosetta - ESA's comet orbiter and lander mission, NASA's 4th Small Body Assessment Group Meeting, Washington, DC, Jan 24-26, 2011. (Oral).

H. Boehnhardt, The Herschel TNO program, New Horizons Team Meeting, Palo Alto, NASA Ames Research Center, Jan 19-20, 2011. (Oral).

H. Boehnhardt, Where and how to search for biogenetics in the planetary system?, ESO Discussion Series, Garching, Sep. 9, 2011. (Oral).

B. P. Boney, G. L. Villanueva, J. Keane, M. A. Disanti, E. L. Gibb, L. Paganini, G. A. Blake, R. S. Ellis, K. Magee-Sauer, M. Combi, H. Boehnhardt, M. Lippi, K. Meech, and M. J. Mumma, Comet 103P/Hartley-2: Rotational and Spin Temperatures of H₂O and Evolution of Water Production Rate During the 2010 Apparition, 42nd Lunar and Planetary Science Conference, The Woodlands, Texas, USA, March 7-11, 2011. (Oral).

P.-A. Bourdin, Scaling a MHD code to a supercomputer - Numerical effects in 3D-MHD simulations, 71. Jahrestagung der DGG gemeinsam mit der AEF, Workshop "Numerische Methoden", Köln, Germany, February 21-24, 2011. (Oral).

P.-A. Bourdin, S. Bingert, and P. Hardi, Coronal model driven by photospheric observations, ESPM-13, 13th European Solar Physics Meeting, Rhodes, Greece, September 12-16, 2011. (Poster).

P.-A. Bourdin, S. Bingert, and P. Hardi, Spectroscopic EUV data as a test for a 3D MHD model of the corona, 4th SOLAIRE network meeting, Teistungen, Germany, May 9-13, 2011. (Poster).

S. Bourouaine, Ion kinetics and turbulence dissipation in the solar wind, Workshop "Vlasov-Maxwell kinetics: theory, simulations and observations in space plasmas", Vienna, Austria, March 28- April 2, 2011. (Oral).

S. Bourouaine, On the interactions of transverse small-scale waves with solar wind ions, 478. WE-Heraeus-Seminar, "Fusion and Astrophysical Plasmas", Bad Honnef, Germany, Apr 17-20, 2011. (Oral).

S. Bourouaine and E. Marsch, Evidence of ion-cyclotron resonance heating of solar wind alpha particles, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011.

S. Bourouaine and E. Marsch, On the preferential heating and acceleration of helium ions: Collisions versus wave effects, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

P. C. Brandt, D. G. Mitchell, B. H. Mauk, C. P. Paranicas, and N. Krupp, Global Magnetospheric Dynamics of Jupiter and Saturn Revealed by ENA Imaging, Magnetospheres of the Outer Planets 2011, Boston University, Boston, MA, USA, July 11-15, 2011. (Oral).

J. Büchner, Computer simulation of space plasmas, Physics Department, University of Nanchang, China, October 14, 2011, lecture course.

J. Büchner, Currents, their dissipation and reconnection in the solar atmosphere, Edmonton University Colloquium, Edmonton, Canada, August 2, 2011, invited colloquium talk.

J. Büchner, Explosive magnetic energy release in the laboratory and in astrophysics, the Sun and other stars, Fakultät für Mathematik, Informatik und Physik, Universität Innsbruck, Austria, March 19, 2011, colloquium talk.

J. Büchner, Large-scale fluid- and kinetic simulation of solar coronal plasmas, 6th International Conference on Numerical Modeling of Space Plasma Flows (ASTRONUM-2011), Valencia, Spain, June 14, 2011, invited Review Lecture.

J. Büchner, Multiscale coupling in collisionless reconnection at the Sun, 478th Heraeus Seminar: FUSION AND ASTROPHYSICAL PLASMAS, Bad Honnef, April 18-20, 2011, invited Review Lecture.

J. Büchner, Numerical simulation of reconnection in the solar corona, 10th International School/Symposium for Space Simulations (ISSS-10), Banff, Canada, July 24-31, 2011, invited review Lecture.

J. Büchner, Simulation of the Solar corona in its coupling with the Chromosphere, Purple Mountain Observatory CAS, Nanjing, China, May 23, 2011, colloquium of the Purple Mountain Observatory of the Chinese Academy of Sciences.

J. Büchner, Simulation of the solar corona reconnection, particle acceleration and heating, International Astrophysics Forum Alpbach - IAFA 2011, Alpbach, Austria, June 20-24, 2011, invited review Lecture. (Oral).

J. Büchner, Solar corona: open questions and how the Solar Orbiter mission will help us to solve them, European Space Astronomy Centre (ESAC) colloquium, Villanueva de la Cañada, Spain, June 10, 2011, colloquium of the ESAC.

J. Büchner, Solar flare electron acceleration, 12th RHESSI workshop, Nanjing, China, October 19, 2011, invited talk.

J. Büchner, The solar corona - open questions, models and an ESA spacecraft project, CAS Astrophysics Colloquium, Beijing, China, May 26, 2011, colloquium of the Chinese Academy of Sciences.

J. Büchner, Turbulent current sheets in the solar atmosphere, Yunnan Astrophysics Colloquium, Kunming, China, May 17, 2011, colloquium of the Yunnan National Observatory of the Chinese Academy of Sciences. (Oral).

J. Büchner, What drives the Solar corona? Modelling magnetic field and plasma dynamics of the Solar atmosphere, Yunnan Astronomical Observatory Colloquium, Kunming, October 10, 2011, invited colloquium talk.

J. Büchner, J. Guo, and J. Santos, Particle Acceleration from a slow reconnecting null and a current filament, 4th International Solaire Network Meeting "Magnetic field emergence, linkage, reconnection, and eruptions in the solar atmosphere", Teistungen, May 9-13, 2011. (Oral).

R. Bučík, U. Mall, A. Korth, G. M. Mason, and B. Klecker, STEREO observations of suprathermal corotating interaction region ions in the helium focusing cone, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Oral).

R. Bučík, U. Mall, A. Korth, and G. M. Mason, Abundances of suprathermal heavy ions in CIRs on STEREO during the minimum of solar cycle 23, 32nd International Cosmic Ray Conference, Beijing, China, August 11-18, 2011. (Oral).

R. Bučík, U. Mall, A. Korth, and G. M. Mason, Abundances of suprathermal ions in CIRs on STEREO during the minimum of solar cycle 23, STEREO-4/SDO-2/SOHO-25 Workshop, Kiel, Germany, July 25-29, 2011. (Oral).

R. Bugiolacchi, Remote sensing of the lunar surface focusing on the Imbrium region: a personal journey, LPI Seminar Series, Houston, TX, 11-21, 2011.

R. Bugiolacchi, U. Mall, and M. Bhatt, A near-infrared reflectance survey across lunar crater Aristoteles, 42nd Lunar and Planetary Science Conference, The Woodlands, Texas, USA, March 7-11, 2011.

R. H. Cameron, Surface magnetic flux transport models, IUGG XXV General Assembly, Melbourne, Australia, June 28 - July 7, 2011. (Oral).

R. H. Cameron, The evolution of the Sun's large scale magnetic field, Asian Pacific Solar Physics Meeting, IIA, Bangalore, India, Mar 21-24, 2011. (Oral).

- H. Cao, C. T. Russell, U. R. Christensen, and M. K. Dougherty, High degree moments and secular variation of Saturn's intrinsic magnetic field: Implications for the planet interior, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011, invited. (Poster).
- H. Cao, C. T. Russell, U. R. Christensen, and M. K. Dougherty, The intrinsic magnetic fields of Saturn and Jupiter: How different are they from the geomagnetic field?, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).
- T. Cavalié, M. Dobrijevic, M. F. Billebaud, E. Lellouch, B. Hesman, T. Fouchet, P. Hartogh, and T. Encrenaz, The vertical profile of CO in the atmosphere of Neptune from JCMT and IRAM observations, EPSC-DPS Joint Meeting 2011, Nantes, France, October 2-7, 2011. (Oral).
- T. Cavalié, H. Feuchtgruber, E. Lellouch, P. Hartogh, R. Moreno, C. Jarchow, F. Billebaud, G. Orton, and H. Sagawa, The horizontal distribution of water in the stratospheres of Jupiter and Saturn with Herschel/PACS, EPSC-DPS Joint Meeting 2011, Nantes, France, October 2-7, 2011. (Oral).
- G. Chanteur, R. Modolo, and E. Dubinin, Dynamics of solar wind helium ions in the Martian environment, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).
- U. R. Christensen, Das Innere der Planeten (Festvortrag), XLAB-Science Festival 2011, Göttingen, Germany, January 26, 2011, invited. (Oral).
- U. R. Christensen, Die ungleichen Geschwister im Sonnensystem - Planetenforschung heute, Vortragsreihe "Weltwissen: Das Universum", Universität zu Köln, April 12, 2011. (Oral).
- U. R. Christensen, Dynamos in the Earth and other planets, 12th International Workshop on Modeling of Mantle Convection and Lithospheric Dynamics, Groß-Dölln, Brandenburg, August 20-25, 2011, invited. (Oral).
- U. R. Christensen, Earths sisters and brothers Planetary Research Today, Seminar, National Geophysics Research Institute, Hyderabad, India, January 31, 2011. (Oral).
- U. R. Christensen, Mode selection and magnetic field reversals in planetary dynamos, Humboldt Kolleg on Self Organised Criticality, Dynamics of complex systems, Indian Institute of Astrophysics, Bangalore, India, February 2-5, 2011, invited. (Oral).
- U. R. Christensen, Planetary magnetic fields and dynamos, University College London, Department of Earth Sciences, Seminar, London, England, October 18, 2011, invited. (Oral).
- U. R. Christensen, Planetary magnetic fields and dynamos (Plenarvortrag), 71. Jahrestagung der Deutschen Geophysikalischen Gesellschaft gemeinsam mit der Arbeitsgemeinschaft Extraterrestrische Forschung, Universität zu Köln, Physikalische Institute, Köln, February 21-24, 2011, invited. (Oral).
- U. R. Christensen, Secular acceleration of the magnetic field - Results from dynamo models compared with observation, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Oral).
- U. R. Christensen, The Earth's magnetic field and the core dynamo, Seminar, National Geophysics Research Institute, Hyderabad, India, January 31, 2011. (Oral).
- U. R. Christensen, Vulkane, Stürme und Landschaften aus Eis: Eine Reise zu den Planeten, Sechsteilige Vortragsreihe für Kinder, Max-Planck Wissenswelten - Vorträge für junge Entdecker" des MPI für Dynamik und Selbstorganisation (MPIDS) und des MPI für Sonnensystemforschung (MPS), Katlenburg-Lindau, March 18, 2011. (Oral).
- J. Crovisier, D. Bockelée-Morvan, N. Biver, P. Hartogh, D. Hutsemékers, E. Jehin, M. Küppers, D. C. Lis, J. Manfroid, M. Renegel, B. Swinyard, S. Szutowicz, M. de Val-Borro, B. Vandenbussche, and the Hsso Team, Observations of the rotational lines of OH in comets, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

W. Curdt and H. Tian, Helicity in spicules and explosive events, 4th Solaire Network Meeting, Teistungen, May 9-13, 2011. (Poster).

W. Curdt and H. Tian, Helicity in spicules and explosive events, European Solar Physics Meeting ESPM-13, Rhodos, Greece, September 12-16, 2011. (Oral).

W. Curdt, H. Tian, and E. Marsch, The coronal convection, IAS Colloquium, Institute d'Astrophysique Spatiale, Paris, March 30, 2011. (Oral).

A. Czechowski, M. Hilchenbach, K. C. Hsieh, and K. Scherer, Energetic Ion Distributions in the Heliosheath and the Production of ENA: HSTOF Observations and model simulations, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Poster).

P. W. Daly, Migration via BibTeX am Beispiel des MPI für Sonnensystemforschung, PubMan Days 2011, Berlin, Sept. 7-8, 2011. (Oral).

P. W. Daly, RAPID Report to the 51st SWT, Cluster 21st Workshop and ESLAB 2011, Brugge, Belgium, Sept. 19-23, 2011. (Oral).

M. Dasi-Espuig, J. Jiang, N. Krivova, and S. Solanki, Reconstructions of total solar irradiance since 1878, 3rd Spanish Solar and Heliosphere meeting, Granada, Spain, May 9-10, 2011.

S. de Raucourt, P. Lognonne, N. Kobayashi, J. Gagnepain-Beyneix, H. Shiraishi, D. Giardini, U. R. Christensen, and R. F. Garcia, The Selene 2 LBBS seismic experiment, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Poster).

M. de Val-Borro, P. Hartogh, C. Jarchow, M. Rengel, N. Biver, D. Bockelée-Morvan, J. Crovisier, D. C. Lis, M. Küppers, and S. Szutowicz, Molecular abundances in comet 103P/Hartley 2 observed with the Arizona Radio Observatory, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Poster).

M. de Val-Borro, P. Hartogh, M. Rengel, and C. Jarchow, Python Tools for Herschel Data Reduction, PyCon 2011, Atlanta, USA, March 11-13, 2011.

M. de Val-Borro, M. Küppers, P. Hartogh, J. Crovisier, D. Bockelée-Morvan, N. Biver, E. Jehin, D. Lis, B. Swinyard, B. Vandenbussche, and the HSSO team, Herschel Observations of Comet 103P/Hartley 2, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

W. Dietrich, J. Wicht, and U. Christensen, A hemispherical dynamo model: Implications for the Martian crustal magnetization, Dynamo iGdR - 2011, Cargese, Sept. 12-17, 2011. (Oral).

W. Dietrich, J. Wicht, and U. Christensen, The convective origin of hemispherical dynamos, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Poster).

W. Dietrich, J. Wicht, and U. Christensen, A hemispherical dynamo model: Implications for the Martian crustal magnetization, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Poster).

W. Dietrich, J. Wicht, and U. Christensen, The convective origin of hemispherical dynamos, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

M. K. Dougherty, O. Grasset, E. Bunce, A. Coustenis, D. V. Titov, C. Erd, M. Blanc, A. J. Coates, A. Coradini, P. Drossart, L. Fletcher, H. Hussmann, R. Jaumann, N. Krupp, O. Prieto-Ballesteros, P. Tortora, F. Tosi, T. Van Hoolst, and J.-P. Lebreton, JUICE (JUpiter ICy moon Explorer): a European-led mission to the Jupiter system, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

L. Duarte, Anelastic dynamo models with radially varying conductivity - an application to the Gas Giants, 2nd PlanetMag Meeting, HKK Hotel, Wernigerode, 18-21, 2011. (Oral).

L. Duarte, Anelastic dynamo models with radially varying conductivity - an application to the gas giants, Dynamo iGdR, Cargese, France, September 12-17, 2011. (Poster).

L. Duarte, J. Wicht, and T. Gastine, Anelastic dynamo models with radially varying conductivity - an application to the gas giants, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Oral).

E. Dubinin, CMEs at June 4-7 2011 impact Mercury, Venus and Mars, Mars Upper Atmosphere Network, Uppsala, Sweden, May 9-11, 2011.

E. Dubinin, Induced magnetospheres: Mars and Venus, Iowa seminar talk, Department of Physics and Astronomy, Iowa University, USA, December 14, 2011, invited. (Oral).

E. Dubinin, Induced magnetospheres on Mars and Venus: Open questions, Seminar in Mullard Space Science Laboratory, UCL, London, Holmbury St. Mary, Dorking, UK, April 20, 2011. (Oral).

E. Dubinin, Plasma boundaries on Mars and Venus, ISSI workshop "Comparative induced magnetospheres", Bern, Switzerland, November 7-11, 2011.

E. Dubinin, M. Fraenz, J. Woch, R. Lundin, J. Wei, and S. Barabash, Bursty escape on Mars, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

E. Dubinin, M. Fraenz, J. Woch, T. Zhang, S. Barabash, R. Lundin, and A. Fedorov, New (or well forgotten) type of induced magnetosphere is observed at Venus, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

C. Ejeta, H. Boehnhardt, S. Bagnulo, G. P. Tozzi, and L. Kolokolova, Spectro-polarimetry of Saturn's moon Iapetus, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

L. Feng, Y. Wei, B. Inhester, M. Wang, W. Gan, and T. Wiegelmans, On the propagation of a CME in the heliosphere, Sun 360, Stereo-4/SDO-2/SOHO-25 Workshop, Kiel, July 25-29, 2011. (Poster).

M. Fraenz, E. Dubinin, E. Nielsen, A. Angsmann, J. Woch, S. Barabash, R. Lundin, A. Fedorov, and T. Zhang, Trans-terminator flow in the ionospheres of Mars and Venus, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

M. Fränz, E. Dubinin, E. Nielsen, A. Angsmann, J. Woch, S. Barabash, R. Lundin, and A. Fedorov, Ionospheric dynamics at Mars and Venus, European Planetary Science Congress, Nantes, France, Oct 03-07, 2011. (Oral).

N. Fray, L. L. Roy, Y. Benilan, C. Briois, H. Cottin, M.-C. Gazeau, G. Poulet, L. Thirkell, and M. Hilchenbach, Thermal evolution of organic residue and TOF-SIMS analysis in the framework of the COSIMA experiment, EPSC-DPS Joint Meeting 2011, Nantes, France, October 2-7, 2011. (Oral).

T. Gastine, Effects of density stratification in driving zonal flow in gas giants, 2nd PlanetMag Meeting, HKK Hotel, Wernigerode, October 18-21, 2011. (Oral).

T. Gastine, Effects of density stratification in driving zonal winds in gas giants, Dynamo iGdR (international Groupe de Recherche), Cargese, France, September 12-17, 2011. (Oral).

T. Gastine and B. Dintrans, Nonlinear simulations of the convection-pulsation coupling, Annual meeting of the SF2A (French Society of Astronomy and Astrophysics), Paris, June 20-23, 2011. (Oral).

T. Gastine and J. Wicht, Compressibility effects on driving zonal flow in gas giants, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Poster).

T. Gastine and J. Wicht, Effects of density stratification in driving zonal flow in gas giants, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Oral).

E. Georgescu, EDI Status of Archiving and Calibration Activities, 6th Operations Review of the Cluster Active Archive and Specification Review of the Cluster Final Archive, Noordwijk, May 18-20, 2011. (Oral).

E. Georgescu, German Cluster Data Centre Status report, Cluster Implementation Working Group Meeting, IWG-43, Noordwijk, May 17, 2011. (Oral).

E. Georgescu, Status of EDI Archiving and Calibration Activities, 13-th CAA Cross-Calibration Meeting, Uppsala, April 13-15, 2011. (Oral).

E. Georgescu and P. C., Data set timing issues in CAA data and raw data, Cluster SOWG Meeting, Darmstadt, May 11-12, 2011. (Oral).

E. Georgescu, F. Plaschke, U. Auster, K.-H. Fornacon, and H. U. Frey, Modelling of Spacecraft Spin Period during Eclipse, Magnetometer Workshop, Sigüenza, Spain, July 18-22, 2011. (Oral).

L. Gizon, Constraining the exoplanetary system HD 52265 using CoRoT asteroseismology, 2nd CoRoT Symposium: "Transiting planets, vibrating stars and their connection", Marseille, France, June 14-17, 2011, invited. (Oral).

L. Gizon, CoRoT seismology of a solar-like planet-host star, PLATO Science Conference, Technische Universität Berlin, Germany, February 24-25, 2011, invited. (Oral).

L. Gizon, Developments in local helioseismology, Seismology of Earth and Stars Conference, Princeton Center for Theoretical Science, Princeton, NJ, USA, May 4-6, 2011, invited. (Oral).

L. Gizon, Seismology of stars, Physikalisches Kolloquium, Institut für Geophysik und extraterrestrische Physik, TU Braunschweig, Germany, November 29, 2011, invited. (Oral).

L. Gizon, Seismology of the Sun and Sun-like Stars, Alexander von Humboldt Annual Lecture, Bangalore, India, September 30, 2011, invited. (Oral).

L. Gizon, Status of PDC, PLATO Board Meeting, Institut für Planetenforschung, DLR, Berlin-Adlershof, Germany, December 20, 2011. (Oral).

L. Gizon, Status of PDC, PLATO Board Meeting, Institut für Planetenforschung, DLR, Berlin-Adlershof, Germany, November 15, 2011. (Oral).

L. Gizon and the PLATO Mission Consortium, The PLATO Data Center, PLATO Science Conference, Technische Universität Berlin, Germany, February 24-25, 2011. (Poster).

W. Goetz, M. H. Hecht, S. F. Hviid, M. B. Madsen, W. T. Pike, U. Staufer, and M. A. Velbel, Detection of a Minor Alteration Phase in Soils at the Phoenix Landing Site, Mars, 42nd Lunar and Planetary Science Conference, The Woodlands, Texas, USA, March 7-11, 2011.

W. Goetz, H. Steininger, E. Steinmetz, M. Bierwirth, F. Goesmann, M. Hilchenbach, P. Coll, F. Raulin, B. Lustremen, C. Philippon, C. Szopa, A. Buch, P. R. Mahaffy, W. B. Brinckerhoff, and R. J. Cotter, The Search for Martian Organics by the Mars Organic Molecule Analyser (MOMA) onboard ExoMars: Next Step Beyond Viking, Phoenix, Mars Science Laboratory, Geobiology in Space Exploration, Marrakech, Morocco, February 7-9, 2011.

W. Goetz, H. Steininger, E. Steinmetz, M. Bierwirth, F. Goesmann, C. Philippon, B. Lustremen, C. Szopa, A. Buch, H. Amundsen, M. Fogel, and A. Steele, Mars Organic Molecule Analyser (MOMA) Field Test as Part of the AMASE 2010 Svalbard Expedition, 42nd Lunar and Planetary Science Conference, The Woodlands, Texas, USA, March 7-11, 2011.

P. Gognonré, B. Banerdt, D. Giardini, U. R. Christensen, T. Pike, and the SEIS-Team, The GEMS (GEophysical Monitoring Station) SEISMometer, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

A. González, P. Hartogh, L. M. Lara, and C. Jarchow, Origin of water in Neptune stratosphere: Photochemical model + Herschel-HIFI and PACS water observations, 8th Annual Meeting Asia Oceania Geosciences Society (AOGS), Taipei, Taiwan, Aug 8-12, 2011. (Oral).

A. González, P. Hartogh, L. M. Lara, and C. Jarchow, Photochemical modeling of the jovian atmosphere, JUICE Science Workshop, Meudon, France, Aug 31 - Sept 1, 2011. (Poster).

A. González, P. Hartogh, L. M. Lara, and C. Jarchow, Photochemistry in Neptune's atmosphere: constrains with Herschel Space Observatory's water observations, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

A. González, L. M. Lara, P. Hartogh, and C. Jarchow, Oxígeno en las estratosferas de los planetas exteriores y Titán, II Encuentro de Exploración del Sistema Solar, Bilbao, Spain, June 16-17, 2011. (Oral).

A. González, L. M. Lara, P. Hartogh, and C. Jarchow, Photochemistry in Uranus atmosphere, 8th Annual Meeting Asia Oceania Geosciences Society (AOGS), Taipei, Taiwan, Aug 8-12, 2011. (Poster).

J. Guo, **J. Büchner, J. Santos**, L. Fletcher, and W. Gan, Particle accelerations from non-resistive magnetic nulls, 4th Solaire Network Meeting "Magnetic field emergence, linkage, reconnection and eruptions in the solar atmosphere", Teistungen, May 9-13, 2011, colloquium of the Yunnan National Observatory of the Chinese Academy of Sciences. (Oral).

S. Haaland, A survey of the polar cap density based on Cluster EFW probe measurements, Nordic Cluster Meeting, Uppsala, Sweden, Aug 24-25, 2011. (Poster).

S. Haaland, Circulation and loss of cold plasma of ionospheric origin, Nordic Cluster Meeting, Uppsala, Sweden, Aug 24-25, 2011. (Oral).

S. Haaland, F. Søraas, P. Daly, C. Johnsen, E. Georgescu, E. Kronberg, K. Oksavik, and N. Østgaard, Determination of polar cap size and shape using energetic particles, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011.

S. Haaland, F. Søraas, P. Daly, E. Kronberg, and K. Oksavik, Determination of polar cap size and shape using energetic particles, AGU Chapman Radiation Belts meeting, St. Johns, NL, Canada, July 17-23, 2011. (Poster).

S. Haaland, F. Søraas, P. Daly, E. Kronberg, and K. Oksavik, Determination of Polar Cap Size and Shape Using Energetic Particles, AGU Chapman Conference Dynamics of the Earth's Radiation Belts and Inner Magnetosphere, St. John's, NL, Canada, July 17-22, 2011. (Poster).

S. Haaland, K. Svenes, B. Lybekk, A. Pedersen, C. Johnsen, E. Engwall, and A. Eriksson, Ionospheric outflow as a source of plasma for the magnetosphere, AGU Chapman Radiation Belts Meeting, St. Johns, NL, Canada, July 17-23, 2011. (Oral).

S. Haaland, K. Svenes, B. Lybekk, A. Pedersen, C. Johnsen, A. Eriksson, and E. Engwall, Ionospheric Outflow as a Source of Plasma for the Magnetosphere, AGU Chapman Conference Dynamics of the Earth's Radiation Belts and Inner Magnetosphere, St. John's, NL, Canada, July 17-22, 2011. (Oral).

S. Haaland, K. Svenes, B. Lybekk, A. Pedersen, and E. Kronberg, Polar cap plasma densities based on Cluster electric field probe measurements, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Poster).

S. Haaland, K. Svenes, B. Lybekk, A. Pedersen, and E. Kronberg, What controls energetic oxygen in the inner magnetosphere?, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Poster).

S. Haaland et al., Determination of Polar Cap Size and Shape by Using Energetic Particles, Cluster 21st Workshop and ESLAB 2011, Brugge, Belgium, Sept. 19-23, 2011. (Poster).

S. Haaland et al., Ionospheric Outflow as a Source of Plasma for the Magnetosphere, Cluster 21st Workshop and ESLAB 2011, Brugge, Belgium, Sept. 19-23, 2011. (Oral).

K. Hallgren, P. Hartogh, and C. Jarchow, A climatology of water vapor above ALOMAR from ground-based microwave observations, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

K. Hallgren, P. Hartogh, and C. Jarchow, A reference water vapor profile above ALOMAR from ground-based microwave observations., European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

K. Hallgren, P. Hartogh, and C. Jarchow, Middle atmospheric water vapor in the polar regions as observed by ground- based microwave spectroscopy., Invited, Meterological Institute at Stockholm University, Stockholm, 6 May, 2011. (Oral).

K. Hallgren, P. Hartogh, and C. Jarchow, The Variability of Middle Atmospheric Water Vapor Above a Midlatitude Location Compared to Subarctic and Arctic Locations, 8th Annual Meeting Asia Oceania Geosciences Society (AOGS), Taipei, Taiwan, August 8-12, 2011. (Oral).

K. Hallgren, P. Hartogh, and F.-J. Lübken, Meridional Differences in Middle Atmospheric Water Vapor During Sudden Stratospheric Warmings, 8th Annual Meeting Asia Oceania Geosciences Society (AOGS), Taipei, Taiwan, August 8-12, 2011. (Oral).

P. Hartogh, Planetary Science with GREAT after Herschel/HIFI, SOFIA Community Task Force Tele-Talk, Telecon-Network, October 19, 2011, invited. (Oral).

P. Hartogh, C. Jarchow, M. Blecka, T. Cavalié, E. Lellouch, M. Rengel, M. de Val-Borro, and T. Encrenaz, The vertical profiles of H₂O, O₂ and CO in the martian atmosphere derived from Herschel/HIFI observations, EPSC-DPS Joint Meeting 2011, Nantes, France, October 2-7, 2011. (Oral).

P. Hartogh, C. Jarchow, M. Blecka, M. Kidger, T. Cavalié, E. Lellouch, M. Rengel, M. de Val-Borro, and T. Encrenaz, The vertical profiles of H₂O, O₂ and CO in the martian atmosphere derived from Herschel/HIFI observations, EPSC-DPS Joint Meeting 2011, Nantes, France, October 2-7, 2011. (Oral).

P. Hartogh, C. Jarchow, M. de Val-Borro, A. Medvedev, M. Rengel, B. M. Swinyard, S. Sidher, E. Lellouch, R. Moreno, M. Blecka, G. Portyankina, and H. Sagawa, Observations of Mars with Herschel: First Results, Fourth international workshop on the Mars atmosphere: Modelling and observations, Paris, France, Feb 8-11, 2011. (Oral).

P. Hartogh, C. Jarchow, B. Swinyard, M. Blecka, E. Lellouch, M. de Val-Borro, M. Rengel, H. Feuchtgruber, H. Sagawa, and G. Portyankina, Herschel observations of Mars, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

P. Hartogh, D. C. Lis, D. Bockelée-Morvan, M. de Val-Borro, N. Biver, M. Küppers, M. Emprechtinger, E. A. Bergin, J. Crovisier, M. Rengel, R. Moreno, G. A. Blake, and S. Szutowicz, The D/H ratio in comet 103P/Hartley 2, EPSC-DPS Joint Meeting 2011, Nantes, France, October 2-7, 2011. (Oral).

J. He, E. Marsch, and C. Tu, Magnetic and spectroscopic properties of supergranular-scale coronal jets and erupting loops in a polar coronal hole, 2011 ILWS Science Workshop "Towards the Next Solar Maximum", Beijing, China, Aug 28 - Sep 1, 2011. (Oral).

J. He, C. Y. Tu, E. Marsch, S. Yao, and H. Tian, Two populations of magnetic helicity in solar wind turbulence, Sun 360, STEREO-4, SDO-2, SOHO-25 Workshop, Kiel, Germany, July 25–29, 2011. (Oral).

D. Heyner, K.-H. Glassmeier, and D. Schmitt, Influence of stellar winds on dynamos in (exo)planets, 7th Potsdam Thinkshop: Magnetic Fields in Stars and Exoplanets, Potsdam, August 22-25, 2011. (Oral).

M. Hilchenbach, Analysis of iron mineral grains with Raman microscopy, Geobiology in Space Exploration, Marrakech, Morocco, Feb 7-14, 2011. (Oral).

M. Hilchenbach, Cometary Grain Analysis and the Evolution of the Heliosphere, AOGS, Taipei, Taiwan, August 8-12, 2011. (Oral).

M. Hilchenbach, Future in-situ exploration tools for asteroids and comets, IAC, Cape Town, South Africa, October 3-7, 2011. (Oral).

M. Hilchenbach, K. C. Hsieh, and A. Czechowski, Potential Sources for Energetic Neutrals from the Heliosphere and Beyond, 10th Annual International Astrophysics Conference Physics of the Heliosphere: A 10-year Retrospective, Maui, USA, Mar 13-18, 2011. (Oral).

M. Hilchenbach, H. Krueger, C. Briois, J. Kissel, Y. Langevin, J. Silen, and R. Schulz, COSIMA - An in-situ cometary grain TOF-SIMS scanning instrument, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

N. M. Hoekzema, O. J. Stenzel, W. J. Markiewicz, E. V. Petrova, and K. Gwinner, The Scale-Height of Optical Depth in Valles Marineris as derived from Shadows in HRSC Images, Fourth international workshop on the Mars atmosphere: Modelling and observations, Paris, February 8-11, 2011. (Poster).

C. Jarchow, P. Hartogh, M. I. Blecka, T. Cavalié, E. Lellouch, and M. Rengel, Determination of isotope ratios in the Martian atmosphere from observations of H₂O and CO with Herschel/HIFI, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Poster).

C. Jarchow, P. Hartogh, E. Lellouch, R. Moreno, H. Feuchtgruber, and T. Cavalié, Water Vapour in the Atmospheres of Uranus and Neptune Observed with the PACS and HIFI Instrument of the Herschel Space Observatory, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

K. Jockers, S. Szutowicz, G. Villanueva, T. Bonev., and P. Hartogh, HCN and CN in Comet 2P/Encke: Models of the non-isotropic, rotation-modulated coma, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011, poster.

S. Kamio, Quantitative study of microflares, Hinode-5, Cambridge, MA, USA, Oct 11-14, 2011, invited. (Oral).

S. Kamio, T. Wiegelmans, W. Curdt, H. Peter, and S. K. Solanki, Origin of flows in coronal loop, Sun 360, Stereo-4/SDO-2/SOHO-25 Workshop, Kiel, July 25-29, 2011. (Oral).

Y. Katoh, F. Tsuchiya, Y. Miyoshi, A. Morioka, H. Misawa, R. Ujiie, W. Kurth, A. Tomas, and N. Krupp, Whistler-Mode Chorus Enhancements and Anisotropic Electrons in the Jovian Inner Magnetosphere, Magnetospheres of the Outer Planets 2011, Boston University, Boston, MA, USA, July 11-15, 2011. (Poster).

T. Kimura, S. Kasahara, M. Fujimoto, and N. Krupp, Non-MHD Aspects of Ganymede's Magnetosphere: Investigation of Wave-Particle Interaction Based on Multi-Instrumental Observations by Galileo, Magnetospheres of the Outer Planets 2011, Boston University, Boston, MA, USA, July 11-15, 2011. (Poster).

P. Kollmann, E. Roussos, C. Paranicas, N. Krupp, and K. Glassmeier, Modeling of Energetic Proton Profiles at Saturn, Magnetospheres of the Outer Planets 2011, Boston University, Boston, MA, USA, July 11-15, 2011. (Poster).

P. Kollmann, E. Roussos, C. Paranicas, N. Krupp, and K. Glassmeier, Effects acting on energetic particles in Saturn's magnetosphere, Cassini MAPS workshop, Annapolis, MD, USA, April 27-29, 2011. (Oral).

P. Kollmann, E. Roussos, C. Paranicas, N. Krupp, and K. Glassmeier, Effects acting on energetic particles in Saturn's magnetosphere, APL seminar, Laurel, MD, USA, April 21, 2011. (Oral).

P. Kollmann, E. Roussos, C. Paranicas, N. Krupp, D. K. Haggerty, and K.-H. Glassmeier, Effects acting on energetic particles in Saturn's magnetosphere, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Poster).

C. M. Korendyke, L. Teriaca, G. A. Doschek, L. K. Harra, U. Schühle, T. Shimizu, and the LEMUR team, LEMUR (Large European Module for solar Ultraviolet Research): a VUV imaging spectrograph for the JAXA Solar-C mission, SPIE Optics+Photonics 2011 Conference 8148, San Diego, CA, USA, August 20 - 25, 2011. (Oral).

E. Kronberg and P. Daly, Annual Report of the RAPID Experiment for the 6th Operations Review of the Cluster Active Archive, 6th Operations Review of the Cluster Active Archive, Noordwijk, May 18, 2011. (Oral).

E. Kronberg, S. Haaland, P. W. Daly, M. Fränz, L. Kistler, and I. Dandouras, What controls energetic oxygen in the inner magnetosphere?, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Poster).

E. Kronberg, S. Kasahara, and N. Krupp, Field-aligned beams and reconnection in the Jovian magnetotail, JUICE workshop, Paris, France, Aug 31 - Sept 1, 2011. (Poster).

E. A. Kronberg, S. Haaland, P. W. Daly, M. Fränz, L. Kistler, and I. Dandouras, Survey of Oxygen to Proton ratio in the inner magnetosphere, AGU Chapman Conference Dynamics of the Earth's Radiation Belts and Inner Magnetosphere, St. Johns, NL, Canada, July 17-22, 2011. (Poster).

E. A. Kronberg, S. Haaland, P. W. Daly, M. Fränz, L. Kistler, and I. Dandouras, What leads to the energetic oxygen acceleration in the magnetotail?, The magnetotail current sheets meeting, IKI, Moscow, Sept. 26-30, 2011. (Oral).

E. A. Kronberg, A. Petrukovich, and P. W. Daly, Plasma sheet thinning derived from particle observations at Earth and Jupiter, The magnetotail current sheets meeting, IKI, Moscow, Sept. 26-30, 2011. (Oral).

E. A. Kronberg, T. Wiegmann, D. H. Nickeler, E. V. Panov, and S. E. Haaland, Confronting MHD-theory with current sheet observations by Cluster, The magnetotail current sheets meeting, IKI, Moscow, Sept. 26-30, 2011. (Oral).

E. A. Kronberg et al., Confronting MHD theory with magnetosheath observations by Cluster, Cluster 21st Workshop and ESLAB 2011, Brugge, Belgium, Sept. 19-23, 2011. (Poster).

E. A. Kronberg et al., What Controls Energetic Oxygen In The InnerMagnetosphere?, Cluster 21st Workshop and ESLAB 2011, Brugge, Belgium, Sept. 19-23, 2011. (Poster).

H. Krüger, Der Stern von Bethlehem - Wirklichkeit oder Fiktion?, Volkshochschule Mosbach/Baden, Binau, November 04, 2011. (Oral).

H. Krüger, Gefahr aus dem All? - Einschläge von Asteroiden und Kometen auf die Erde, Volkshochschule Mosbach/Baden, Binau, April-15, 2011. (Oral).

H. Krüger, Gefahr aus dem All? Einschläge von Asteroiden und Kometen auf die Erde, Public talk, Heimat- und Palitzschmuseum Prohlis/Dresden, September 22, 2011. (Oral).

H. Krüger, Jupiter's Dust Disk - An Astrophysical Laboratory, Invited Talk, Center for Planetary Science; Kobe University; Japan, November 30, 2011. (Oral).

H. Krüger, Kometen - Boten aus der Frühzeit des Sonnensystems, Öffentlicher Vortrag, Nicolaus-Copernicus-Planetarium Nürnberg, Nov 22, 2011. (Oral).

H. Krüger, Mineral measurements with the Cosima reference model (RM) in Katlenburg-Lindau, Cosima science meeting, Glurns/Italien, May 2-6, 2011. (Oral).

H. Krüger, C. Briois, C. Engrand, H. Fischer, M. Hilchenbach, K. Hornung, J. Kissel, J. Silén, L. Thirkell, M. Trieloff, and K. Varmuza, Rosetta/Cosima: Principal Component Analysis applied to Time-of-Flight Secondary Ion Mass Spectra, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

H. Krüger, T. Ossowski, A. Flandes, S. K. J., H.-H. Fischer, **M. Jünemann**, **A. Loose**, and M. Sperl, DIM Status and Calibration Activities, Rosetta/SESAME Workshop, MPS, Katlenburg-Lindau, September 26-28, 2011. (Oral).

H. Krüger, T. Ossowski, A. Flandes, K. J. Seidensticker, I. Apahty, H.-H. Fischer, A. Hirn, **M. Jünemann**, **A. Loose**, A. Peter, M. Podolak, **R. Roll**, and M. Sperl, Laboratory Calibration of the Dust Impact Monitor (DIM) onboard the Rosetta Lander Philae, AOGS Conference, Taipei, Taiwan, August 8-12, 2011. (Oral).

H. Krüger, T. Ossowski, A. Flandes, K. J. Seidensticker, I. Apahty, H.-H. Fischer, A. Hirn, **M. Jünemann**, **A. Loose**, A. Peter, and M. Sperl, Dust Impact Monitor DIM onboard Rosetta/Philae: Laboratory Calibration with impact experiments, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

H. Krüger, **P. Strub**, N. Altobelli, and E. Grün, The Mass Distribution of Interstellar Dust in the Heliosphere from In-situ Measurements, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

H. Krüger, **P. Strub**, M. Horanyi, V. J. Sterken, N. Altobelli, R. Srama, F. Postberg, and E. Grün, In-situ spacecraft measurements of interstellar dust in the solar system, AOGS Conference, Taipei, Taiwan, August 8-12, 2011. (Oral).

N. Krupp, Jupiter Magnetosphere Science Objectives for the JUICE mission, JUICE science workshop, Paris, France, Aug 31 - Sept 1, 2011. (Oral).

N. Krupp, Remote Europa Science Objectives for the JUICE mission, JUICE science workshop, Paris, France, Aug 31 - Sept 1, 2011. (Oral).

N. Krupp, **P. Kollmann**, and **E. Roussos**, Energetic particle responses during the recent flybys E12, E13 and Rh3:MIMI/LEMMS results, Cassini satellite-magnetosphere interaction workshop, JPL, Pasadena, Jan 25, 2011. (Oral).

N. Krupp, A. Radioti, **E. Roussos**, D. Grodent, D. A. Gurnett, D. G. Mitchell, and M. K. Dougherty, Bi-directional electron distributions as tracers for the open-closed field line boundary in Saturn's Magnetosphere, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

N. Krupp, A. Radioti, **E. Roussos**, D. Grodent, D. A. Gurnett, D. G. Mitchell, and M. K. Dougherty, Open-Closed Field Line Boundary Characterization of Saturn's Magnetosphere Using Cassini MIMI-LEMMS Data And Auroral Observations From HST And Cassini- UVIS, Magnetospheres of the Outer Planets 2011, Boston University, Boston, MA, USA, July 11-15, 2011. (Oral).

N. Krupp, **E. Roussos**, **P. Kollmann**, G. Jones, C. Arridge, C. Paranicas, D. Mitchell, S. Krimigis, and K. Khurana, Energetic particles in the vicinity of Rhea compared to Enceladus and Dione: Cassini MIMI/LEMMS results, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

N. Krupp, **E. Roussos**, **P. Kollmann**, G. H. Jones, C. S. Arridge, P. Paranicas, D. G. Mitchell, S. M. Krimigis, A. Rymer, T. P. Armstrong, D. G. Hamilton, K. K. Khurana, S. Kempf, and R. Srama, The Cassini Enceladus encounters 2005-2010 in the view of energetic electron measurements, Cassini MAPS workshop, Annapolis, MD, USA, April 27-29, 2011. (Poster).

T. Kuroda, **A. S. Medvedev**, and Y. Kasaba, Influence of atmospheric dynamics on the CO₂ ice cloud formation on Mars studied with a general circulation model, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Poster).

L. Le Corre, **V. Reddy**, and **A. Nathues**, Spectral Indices for Identifying Terrains on Vesta with Dawn Framing Camera Filters, 74th Annual Meeting of the Meteoritical Society, London, UK, August 8-12, 2011. (Poster).

L. Le Corre, V. Reddy, A. Nathues, I. Hall, P. Gutiérrez-Marqués, and M. Hoffmann, DawnKey: Automated Identification of Terrains on 4 Vesta using Dawn Framing Camera Bands, EPSC-DPS Joint Meeting 2011, Nantes, France, October 2-7, 2011. (Poster).

K.-W. Lee and J. Büchner, Collisionless anisotropic electron heating and turbulent transport in coronal flare loops, 478th Heraeus Seminar: FUSION AND ASTROPHYSICAL PLASMAS, Bad Honnef, April 18-20, 2011. (Oral).

K.-W. Lee and J. Büchner, Collisionless turbulent transport and anisotropic electron heating in coronal flare loops, 4th International Solaire Network Meeting "Magnetic field emergence, linkage, reconnection, and eruptions in the solar atmosphere", Teistungen, May 9-13, 2011. (Oral).

K.-W. Lee and J. Büchner, Examination of heating of coronal bright points through a new parallel implementation of the LINMOD3D code, 10th International School/Symposium for Space Simulations (ISSS-10), Banff, Canada, July 24-31, 2011. (Poster).

K.-W. Lee and J. Büchner, PIC simulation of anisotropic electron heating and turbulent transport in coronal loops, 10th International School/Symposium for Space Simulations (ISSS-10), Banff, Canada, July 24-31, 2011. (Poster).

E. Lellouch, P. Hartogh, H. Feuchtgruber, B. Swinyard, R. Moreno, T. Cavaillé, G. Orton, D. Bockelée-Morvan, N. Biver, H. Sagawa, and C. Jarchow, Observations of the Giant Planets with Herschel, EPSC-DPS Joint Meeting 2011, Nantes, France, October 2-7, 2011. (Oral).

E. Lellouch, R. Moreno, D. Bockelée-Morvan, N. Biver, P. Hartogh, T. Cassidy, M. Rengel, C. Jarchow, T. Cavaillé, and J. Crovisier, Observations of the Enceladus H₂O torus with Herschel / HIFI, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

E. Lellouch, R. Moreno, M. Rengel, R. Courtin, L. Lara, P. Hartogh, and the HSSO Team, Titan's atmospheric composition: observations from Herschel in the sub-millimetre range, Titan Science Meeting, Abbaye de St Jacut de la Mer, France, June 20-23, 2011. (Oral).

D. C. Lis, P. Hartogh, D. Bockelée-Morvan, M. de Val-Borro, N. Biver, M. Küppers, M. Emprechtinger, E. A. Bergin, J. Crovisier, M. Rengel, R. Moreno, S. Szutowicz, G. A. Blake, and H. Team, Herschel observations of comet 103P/Hartley 2: D/H in a Jupiter family comet, The Molecular Universe (IAU Symposium 280), Toledo (Spain), May 30 - June 3, 2011. (Oral).

G. Machtoub, A. Medvedev, and P. Hartogh, Modeling the Seasonal Variability of the H₂O Vapor and Ice Clouds in the Martian atmosphere, Fourth International workshop on the Mars Atmosphere: Modelling and observations, Paris, France, Feb. 8-11, 2011. (Poster).

G. Machtoub, A. Medvedev, and P. Hartogh, Modeling the Seasonal Variability of the H₂O Vapor and Ice Clouds in the Martian atmosphere, Fourth international workshop on the Mars atmosphere: Modeling and observations, Paris, Feb 8-11, 2011. (Poster).

O. Maj, R. Bilato, M. Brambilla, and E. Marsch, Numerical modelling of ion distributions in coronal funnels in presence of ion cyclotron waves, 478. WE-Heraeus-Seminar, "Fusion and Astrophysical Plasmas", Bad Honnef, April 17-20, 2011. (Oral).

E. Marsch, Corona and Solar Wind II (Lecture), 5th El Leoncito International Solar Physics School, El Leoncito, Argentina, February 7-13, 2011. (Oral).

E. Marsch, Coronal flows and solar wind turbulence (Lecture), 5th El Leoncito International Solar Physics School, El Leoncito, Argentina, February 7-13, 2011. (Oral).

E. Marsch, Origin and Properties of the Solar Wind, ESPM-13 Conference, 13th European Solar Physics Meeting, Rhodes, Greece, September 12-16, 2011, invited. (Oral).

E. Marsch, Plasma Physics I (Lecture), 5th El Leoncito International Solar Physics School, El Leoncito, Argentina, February 7-13, 2011. (Oral).

E. Marsch, Plasma Physics II (Lecture), 5th El Leoncito International Solar Physics School, El Leoncito, Argentina, February 7–13, 2011. (Oral).

E. Marsch, Plasma Physics of the Solar Wind — From the Sun's Corona to the Heliopause, Encontro de Fisica 2011, Sociedade Brasileira de Fisica, Iguacu, Brazil, June 6-9, 2011, invited. (Oral).

E. Marsch, Plasma turbulence and ion kinetics in the solar wind, 478. WE-Heraeus-Seminar, "Fusion and Astrophysical Plasmas", Bad Honnef, April 17-20, 2011. (Oral).

E. Marsch, Plasma turbulence and ion kinetics in the solar wind, Seminar talk at the School for Earth and Space Science, Peking University, Beijing, China, Sep 5, 2011, invited. (Oral).

E. Marsch, Plasma turbulence and ion kinetics in the solar wind, Seminar at the Theory division (Stellarator physics) of the IPP in Greifswald, Greifswald, October 5, 2011.

E. Marsch, Solar activity and space weather, Seminar talk at the China University of Geosciences, Beijing, China, Sep 6, 2011, invited. (Oral).

E. Marsch, The 3-D Heliosphere II (Lecture), 5th El Leoncito International Solar Physics School, El Leoncito, Argentina, February 7–13, 2011. (Oral).

E. Marsch, The DLR programme and its contributions to ILWS, 2011 ILWS Science Workshop "Towards the Next Solar Maximum", Beijing, China, Aug 28 - Sep 1, 2011. (Oral).

E. Marsch, What science do we need to accomplish before Solar Orbiter and Solar Probe Plus? Kinetic Physics of the Solar Wind, Fourth Solar Orbiter Workshop, Telluride, Colorado, USA, March 27–31, 2011. (Oral).

E. Marsch and S. Bourouaine, Ion kinetics and turbulence dissipation in the solar wind, Fourth Solar Orbiter Workshop, Telluride, Colorado, USA, March 27–31, 2011. (Poster).

T. McEnulty, J. Luhmann, R. dePater, T. Zhang, C. Russell, J. Ma, N. Edberg, E. Dubinin, Y. Futaana, A. Fedorov, and B. S., VEX observations of heliospheric structures influencing planetary ion escape, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

D. Meduri, A statistical analysis of reversal sequences: geomagnetic field and numerical dynamo models, Dynamo iGdR, Cargese, France, September 12-17, 2011. (Poster).

D. Meduri, D. Schmitt, J. Wicht, V. Carbone, and L. Sorriso-Valvo, A statistical analysis of reversal sequences: geomagnetic field, coupled spin and numerical dynamo, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Poster).

A. S. Medvedev, Atmospheric waves from the point of view of a modeler, Atmospheric Waves Workshop, ESTEC, Noordwijk, The Netherlands, November 9-10, 2011. (Oral).

A. S. Medvedev and E. Yiğit, Extending gravity wave parameterizations into planetary thermospheres and modeling their effects, CAWSES SPP Meeting, Streemannzentrum, Bonn, September 7-9, 2011. (Oral).

A. S. Medvedev, E. Yiğit, and P. Hartogh, Effects of gravity wave drag in the martian atmosphere: simulations with a GCM, 4th International Workshop on the Mars Atmosphere: Modelling and Observations, Paris, France, February 8-11, 2011. (Oral).

A. S. Medvedev, E. Yiğit, and P. Hartogh, Influence of vertically propagating gravity waves on the atmosphere of Mars, AGU Chapman Conference on Atmospheric Gravity Waves, Honolulu, Hawaii, February 28 - March 4, 2011.

A. S. Medvedev, E. Yiğit, P. Hartogh, and E. Becker, Influence of gravity waves on the Martian atmosphere, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

A. S. Medvedev, E. Yiğit, A. A. Kutepov, and A. G. Feofilov, Impact of an additional radiative CO₂ cooling induced by subgrid-scale gravity waves in the middle and upper atmosphere, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Poster).

M. Mommert, A. W. Harris, T. G. Müller, J. Stansberry, E. Lellouch, H. Böhnhardt, A. Delsanti, R. Duffard, S. Fornasier, P. Hartogh, F. Henry, C. Kiss, M. Mueller, A. Pal, S. Protopapa, P. Santos-Sanz, N. Szalai, M. Rengel, and E. Vilenius, TNOs are Cool: A Survey of the Transneptunian Region - Physical Characterization of 16 Plutinos using PACS observations, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

H. Moradi, Developments in imaging sunspots, Seismology of Earth and Stars Conference, Princeton Center for Theoretical Science, Princeton, NJ, USA, May 4-6, 2011, invited. (Oral).

R. Moreno, E. Lellouch, R. Courtin, B. Swinyard, T. Fulton, G. Orton, P. Hartogh, C. Jarchow, T. Cavalie, and H. Feuchtguber, Observations of CO and HCN on Neptune with Herschel SPIRE, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

R. Moreno, E. Lellouch, P. Hartogh, M. A. Gurwell, L. M. Lara, R. Courtin, M. Rengel, A. Mouillet, C. Jarchow, D. Bockelee-Morvan, N. Biver, and D. C. Lis, Confirmation of the first detection of HNC on Titan, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

T. Müller, E. Lellouch, C. Kiss, T. Lim, S. Fornasier, P. Santos-Sanz, E. Vilenius, A. Delsanti, R. Duffard, P. Hartogh, F. Henry, M. Mommert, M. Müller, N. Szalai, J. Stansberry, and J. L. Ortiz, Makemake: A truly exotic TNO!, EPSC-DPS Joint Meeting 2011, Nantes, France, October 2-7, 2011. (Oral).

T. Müller, E. Lellouch, C. Kiss, T. Lim, S. Fornasier, P. Santos-Sanz, E. Vilenius, A. Delsanti, R. Duffard, P. Hartogh, F. Henry, M. Mommert, M. Müller, N. Szalai, J. Stansberry, and J. L. Ortiz, Makemake: A truly exotic TNO!, EPSC-DPS Joint Meeting 2011, Nantes, France, October 2-7, 2011. (Oral).

M. J. Mumma, B. P. Bonev, G. L. Villanueva, L. Paganini, M. A. Disanti, E. L. Gibb, J. V. Keane, K. J. Meech, G. A. Blake, R. S. Ellis, M. Lippi, H. Boehnhardt, and K. Magee-Sauer, Temporal and Spatial Aspects of Gas Release During the 2010 Apparition of Comet 103P/Hartley-2, EPSC-DPS Joint Meeting 2011, Nantes, France, Oct. 2-7, 2011. (Oral).

M. J. Mumma, M. A. Disanti, B. P. Bonev, L. Paganini, G. L. Villanueva, E. L. Gibb, J. Keane, G. A. Blake, R. S. Ellis, K. Magee-Sauer, M. Combi, H. Boehnhardt, M. Lippi, and K. Meech, Primary Volatiles During the 2010 Apparition of Comet 103P/Hartley-2 as Revealed at Infrared Wavelengths: Production Rates and Spatial Profiles, 42nd Lunar and Planetary Science Conference, The Woodlands, Texas, USA, March 7-11, 2011. (Oral).

M. H. Nakamura, M. Kobayashi, T. Miyachi, S. Takechi, S. Sugita, N. Okada, R. Srama, and H. Krüger, The development of the PZT type cosmic dust detector: the dependence of the response signal on the collisional position, AOGS Conference, Taipei, Taiwan, August 8-12, 2011. (Oral).

R. Nakamura, M. Volwerk, W. Baumjohann, B. Zieger, E. Panov, E. A. Lucek, I. Dandouras, B. Klecker, L. Juusola, P. W. Daly, and E. A. Kronberg, Cluster multi-point observations of flow-braking and dipolarization during Sep.7, 2007 1250 UT event., European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

A. Nathues, U. R. Christensen, V. Reddy, L. LeCorre, H. Sierks, C. M. Pieters, M. Gaffey, B. W. Denevi, C. de Sanctis, M. Hoffmann, S. Schroeder, J.-B. Vincent, C. T. Russell, C. A. Raymond, R. Jaumann, H. U. Keller, S. Mottola, G. Neukum, T. B. McCord, H. Hiesinger, J. M. Sunshine, P. Gutierrez-Marques, T. Maué, and I. Hall, Vesta in Color: Lithologic heterogeneity from Dawn Framing Camera Images, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011, invited. (Oral).

D. Nickel and T. Wiegelmann, Thin current sheets caused by plasma flow gradients in space plasma, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Poster).

A. Nindos, S. Patsourakos, and T. Wiegelmann, On the initiation of the 2011 February 15 coronal mass ejection, Sun 360, Stereo-4/SDO-2/SOHO-25 Workshop, Kiel, July 25-29, 2011. (Oral).

K. Ogasawara, S. A. Livi, D. G. Mitchell, T. P. Armstrong, and N. Krupp, Properties of energetic particle bursts at dawn-side magnetosheath: Cassini observations during the Earth swing-by 1999, AOGS, Taipei, Taiwan, Aug 8-12, 2011. (Oral).

P. Olson, U. R. Christensen, and P. E. Driscoll, Dynamo variability and the frequency spectrum of the geomagnetic dipole moment, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011, invited. (Oral).

G. Orton, B. Swinyard, M. Griffin, T. Fulton, E. Polhampton, C. Hopwood, R. Moreno, E. Lellouch, and P. Hartogh, Spectroscopic Observations of Uranus and Neptune by the Herschel SPIRE Experiment: Constraints on Global-Mean Temperature Structure and Composition, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

C. Paranicas, E. Roussos, P. Kollmann, N. Krupp, J. Carbary, D. Mitchell, T. Krimigis, B. Mauk, and G. Clark, Particle energization at Saturn, Magnetospheres of the Outer Planets 2011, Boston University, Boston, MA, USA, July 11-15, 2011. (Oral).

E. V. Petrova, N. M. Hoekzema, W. J. Markiewicz, and N. Thomas, Optical Depth of the Martian atmosphere and Surface Albedo from High Resolution Orbiter Images, Fourth international workshop on the Mars atmosphere: Modelling and observations, Paris, February 8-11, 2011. (Poster).

T. Prettyman, H. McSween, M. C. de Sanctis, E. Ammannito, D. Blewett, B. Buratti, F. Capaccioni, M. T. Capria, F. Carraro, J. P. Combe, A. Coradini, B. Denevi, W. Feldman, G. Filacchione, S. Fonte, O. Forni, M. Gaffey, B. Garry, H. Hiesinger, R. Jaumann, U. Keller, D. Lawrence, L. Le Corre, J.-L. Li, G. Magni, S. Marchi, T. Mauve, T. McCord, T. McCoy, L. McFadden, D. Mittlefehldt, A. Nathues, G. Neukum, R. Noschese, E. Palmer, C. Pieters, C. A. Raymond, R. Reedy, V. Reddy, C. T. Russell, J. Scully, J. Sunshine, M. Sykes, T. Titus, M. Toplis, F. Tosi, P. Tricarico, A. Yingst, and M. Zuber, Dawn maps the surface composition of Vesta, EPSC-DPS Joint Meeting 2011, Nantes, France, October 2-7, 2011. (Oral).

S. Protopapa, H. Boehnhardt, L. Barrera, W. M. Grundy, D. P. Cruikshank, J. M. Sunshine, L. M. Feaga, and M. F. A'Hearn, Longitudinal and temporal variability of Pluto, EPSC-DPS Joint Meeting 2011, Nantes, France, Oct. 2-7, 2011. (Oral).

A. Radioti, E. Roussos, D. Grodent, J. Gerard, N. Krupp, J. Gustin, B. Bonfond, and W. Pryor, Auroral signatures of injections in the magnetosphere of Saturn, Magnetospheres of the Outer Planets 2011, Boston University, Boston, MA, USA, July 11-15, 2011. (Poster).

V. Reddy, L. Le Corre, A. Nathues, I. Hall, P. Gutierrez-Marques, and M. Hoffmann, Automated Spectral System for Terrain Classification, Mineralogy of Vesta from the Dawn Framing Cameras, EPSC-DPS Joint Meeting 2011, Nantes, France, October 2-7, 2011. (Poster).

V. Reddy, L. Le Corre, A. Nathues, H. Sierks, U. R. Christensen, M. Hoffmann, S. Schroeder, J.-B. Vincent, H. Y. McSween, B. W. Denevi, J.-Y. Li, C. M. Pieters, M. Gaffey, D. W. Mittlefehldt, B. J. Buratti, M. Hicks, T. B. McCord, J. P. Combe, C. de Sanctis, C. T. Russell, C. A. Raymond, P. Gutierrez-Marques, T. Mauve, and I. Hall, Vesta in color: High resolution mapping from Dawn Framing Camera images, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Poster).

M. Rengel, El Sistema Solar Visto por el Telescopio Espacial Herschel, 50th Anniversary of the Planetario Humboldt, Caracas, Venezuela, Feb 12, 2011. (Oral).

M. Rengel, P. Hartogh, T. Müller, the HSSO Team, and TNOs are Cool Team, Communicating Herschel Key Programs in Solar System Studies with the Public, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Poster).

M. Rengel, P. Hartogh, and H. Sagawa, Recent Sub-millimeter Heterodyne Observations of CO in Venus's Mesosphere obtained with HHSMT and APEX, 8th Annual Meeting Asia Oceania Geosciences Society (AOGS), Taipei, Taiwan, August 08-12, 2011. (Oral).

M. Rengel, P. Hartogh, H. Sagawa, E. Lellouch, H. Feuchtgruber, R. Moreno, and R. Courtin, Looking at the key atmospheric gases in Titan: PACS / Herschel Spectrum of Titan, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

M. Rengel, P. Hartogh, H. Sagawa, E. Lellouch, H. Feuchtgruber, R. Moreno, C. Jarchow, R. Courtin, J. Cernicharo, and the HssO Team, Looking at the key atmospheric gases in Titan with Herschel/PACS and APEX/SIFI, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

M. Rengel, H. Sagawa, P. Hartogh, E. Lellouch, H. Feuchtgruber, R. Moreno, C. Regis, J. Cernicharo, and the HssO Team, Looking at the key atmospheric gases in Titan with APEX/SIFI and Herschel/PACS, Titan Science Meeting, Abbaye de St Jacut de la Mer, France, June 20-23, 2011. (Poster).

M. Rengel and the HssO Team, Science with Herschel/HIFI - Updates, HIFI Consortium Meeting/Colocation, SRON Groningen, Netherlands, October 10-14, 2011. (Oral).

E. Richer, G. Chanteur, R. Modolo, and E. Dubinin, Properties of reflected solar wind protons on the martian bow shock: investigations by 3D simulations, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

E. Roussos, N. Krupp, M. Andriopoulou, P. Kollmann, and C. Paranicas, Moon-magnetosphere interaction signatures as tools for studying the magnetospheres of outer planets, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011.

E. Roussos, N. Krupp, M. Andriopoulou, P. Kollmann, C. P. Paranicas, M. F. Thomsen, D. G. Mitchell, and S. M. Krimigis, Energetic charged particle absorption signatures in Saturn's magnetosphere: observations and applications, Magnetospheres of the Outer Planets 2011, Boston University, Boston, MA, USA, July 11-15, 2011. (Oral).

E. Roussos, N. Krupp, P. Kollmann, and C. Paranicas, Energetic electron observations of Rhea's magnetospheric interaction, CASSINI/MAPS Workshop 2010., Annapolis, USA, April 7-9, 2011.

E. Roussos, N. Krupp, P. Kollmann, C. Paranicas, D. G. Mitchell, and S. M. Krimigis, Energetic electron observations of Rhea's magnetospheric interaction, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

E. Roussos, N. Krupp, C. Paranicas, M. F. Thomsen, P. Kollmann, D. G. Mitchell, S. M. Krimigis, and G. H. Jones, Moon-magnetosphere interaction signatures as tools for studying the magnetospheres of outer planets, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

A. Rymer, D. Mitchell, T. Hill, E. Kronberg, and N. Krupp, Saturn's Magnetospheric Period, Magnetospheres of the Outer Planets 2011, Boston University, Boston, MA, USA, July 11-15, 2011. (Oral).

J. Sanchez, V. Reddy, and A. Nathues, Phase angle-induced effects on the spectrum of the V-type NEA Magellan, DAWN Science Team Meeting, Nördlingen, May 8-13, 2011. (Oral).

J. Sanchez, V. Reddy, and A. Nathues, Surface mineralogy of two V-type near-Earth asteroids, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Poster).

P. Santos-Sanz, C. Kiss, E. Lellouch, T. G. Müller, J. Stansberry, H. Boehnhardt, P. Lacerda, J. L. Ortiz, A. Thirouin, R. Duffard, A. Pal, E. Vilenius, S. Fornasier, T. Lim, and the "Tnos Are Cool" Team, Thermal lightcurve observations of TNOs with Herschel, EPSC-DPS Joint Meeting 2011, Nantes, France, Oct 2-7, 2011. (Oral).

U. Schühle, J.-P. Halain, S. Meining, and L. Teriaca, The Lyman-alpha telescope of the Extreme Ultraviolet Imager on Solar Orbiter, SPIE Optics+Photonics 2011 Conference 8148, San Diego, CA, USA, August 20 - 25, 2011. (Oral).

H. Schunker, Local helioseismology amid surface magnetic fields, LWS/SDO-3/SOHO-26/GONG-2011 Workshop "Solar Dynamics and Magnetism from the Interior to the Atmosphere", Stanford University, Stanford, CA, USA, October 31-November 4, 2011, invited. (Oral).

H. Schunker, Understanding the helioseismic signature of sunspots, LWS/SDO Workshop: "The Many Spectra of Solar Activity", Lake Tahoe, CA, USA, May 1-5, 2011, contributed. (Oral).

M. Schüssler, Solar magnetism: complexity, simplicity, and a bad conscience, Munich Joint Astronomy Colloquium, Garching, March 31, 2011. (Oral).

N. Sergis, T. Krimigis, E. Roussos, A. Masters, C. Jackman, M. Thomsen, D. Hamilton, N. Krupp, D. Mitchell, M. Dougherty, A. J. Coates, and F. J. Crary, Hot O⁺ ion presence and directional flows in the magnetosheath of Saturn, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

J. Sethunadh, A. Medvedev, and P. Hartogh, First results from a general circulation model of the Jovian stratosphere, JUICE Science Workshop, Meudon, France, Aug 31 - Sept 1, 2011. (Poster).

H. M. Smith, E. Marsch, and P. Helander, Numerical simulations of electron transport in the solar wind, 478. WE-Heraeus-Seminar, "Fusion and Astrophysical Plasmas", Bad Honnef, April 17-20, 2011. (Oral).

S. Solanki, Global climate change: is the Sun to blame?, STHESCA: Science, Technology, Higher Education and Society in the Conceptual Age, Krakow, Poland, July 5-7, 2011. (Oral).

S. Solanki, Is the Sun to blame for global warming?, STARMUS Festival, Teneriffe, Spain, June 20-25, 2011. (Oral).

S. Solanki, Solar irradiance reconstructions using HMI data, 1st LWS / SDO Workshop "The may spectra of Solar activity.", Squaw Valley, CA, USA, May 1-5, 2011. (Poster).

S. Solanki, Sunrise: the mission and selected science results, Korean Astronomical Society Fall Meeting, Seoul, Korea, October 5-7, 2011. (Oral).

S. Solanki, Uncovering the Sun's magnetic personality: Results from recent solar missions, NAM, Llunedadno, North Wales, UK, April 17-21, 2011. (Oral).

S. Solanki, Unserem Leben spendenden Stern auf der Spur: Einblicke in die Sonnenforschung, The Sun 360, Stereo-4/SDO-2/SOHO-25 Workshop, Kiel, Germany, July 25-29, 2011. (Oral).

S. Solanki, What lessons from Sunrise are of relevance for Solar Orbiter?, 4th Solar Orbiter Workshop, Telluride, CO, USA, March 27-30, 2011. (Oral).

P. Song and V. M. Vasyliūnas, Inductive-dynamic coupling of the ionosphere with the thermosphere and magnetosphere, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Poster).

T. Stahn, Asteroseismic constraints on the rotation of the solar-like star HD52265, 4th KASC workshop: "From unprecedeted data to revolutionary science", High Altitude Observatory, Boulder, CO, USA, July 11-15, 2011, contributed talk. (Oral).

T. Stahn, Global fit of solar-like oscillations: validation using synthetic and solar observations, 2nd CoRoT Symposium: "Transiting planets, vibrating stars and their connection", Marseille, France, June 14-17, 2011. (Poster).

O. J. Stenzel, H. U. Keller, N. M. Hoekzema, W. J. Markiewicz, and H. Hoffmann, Limb Observations of the Martian atmosphere with Mars Express' High Resolution Stereo Camera, Fourth international workshop on the Mars atmosphere: Modelling and observations, Paris, February 8-11, 2011. (Oral).

O. J. Stenzel, H. U. Keller, N. M. Hoekzema, W. J. Markiewicz, and H. Hoffmann, The Limb of the Martian Atmosphere in Mars Express' High Resolution Stereo Camera Images, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Oral).

C. Straub, C. Hocke, B. Tschanz, N. Kämpfer, P. Hoffmann, W. Singer, K. Hallgren, P. Hartogh, and T. Ulich, The Sudden Stratospheric Warming 2010 over the European Arctic region observed by ground based measurements of the Mesosphere/Mesopause region, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

P. Strub, H. Krüger, V. Sterken, E. Grün, and M. Horanyi, In-Situ Interstellar Dust Measurements in the Solar System, International Conference on the Physics of Dusty Plasmas ICPDP 2011, Garmisch-Partenkirchen, May 16-20, 2011. (Poster).

X. Sun, J. T. Hoeksema, Y. Liu, T. Wiegelmann, and K. Hayashi, Evolution of Magnetic Field in the Flaring Active Region AR 11158 Based on SDO/HMI Observation, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Poster).

X. Sun, J. T. Hoeksema, Y. Liu, T. Wiegelmann, and K. Hayashi, Magnetic Field Topology and Energetics in the Flaring Active Region 11158, Sun 360, Stereo-4/SDO-2/SOHO-25 Workshop, Kiel, July 25-29, 2011. (Oral).

X. Sun, J. T. Hoeksema, Y. Liu, T. Wiegelmann, and K. Hayashi, The evolution of magnetic field in AR11158 from SDO/HMI, LWS/SDO workshop: "The many spectra of solar activity", Squaw Valley, USA, May 1-5, 2011. (Oral).

M. Švanda, Validated helioseismic inversions for 3-D vector flows: Applications to SDO data, LWS/SDO Workshop: "The Many Spectra of Solar Activity", Lake Tahoe, CA, USA, May 1-5, 2011, contributed. (Oral).

S. Szutowicz, N. Biver, D. Bockele-Morvan, J. Crovisier, R. Moreno, M. de Val-Borro, P. Hartogh, M. Rengel, D. C. Lis, M. Kueppers, M. Emprechtinger, E. A. Bergin, G. A. Blake, B. Vandenbussche, B. Swinyard, and H. Team, Comet 10P/Tempel 2 outgassing observed with Herschel, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

L. Teriaca, V. Andretta, F. Auchere, C. Brown, E. Buchlin, G. Cauzzi, J. L. Culhane, W. Curdt, J. M. Davila, G. Del Zanna, G. A. Doschek, S. Fineschi, A. Fludra, P. T. Gallagher, L. Green, L. K. Harra, S. Imada, D. Innes, B. Kliem, C. Korendyke, J. T. Mariska, V. Martinez-Pillet, S. Parenti, S. Patsourakos, L. Poletto, U. Schuhle, H. Peter, R. Rutten, M. Siemer, T. Shimizu, H. Socas-Navarro, S. K. Solanki, D. Spadaro, J. Trujillo-Bueno, J.-C. Vial, H. P. Warren, R. Walsh, T. Wiegelmann, B. Winter, and P. Young, LEMUR: Large European Module for solar Ultraviolet Research, UK National Astronomy Meeting (NAM 2011), Llandudno, Wales, UK, April 17-21, 2011. (Poster).

L. Teriaca, V. Andretta, F. Auchère, C. M. Brown, E. Buchlin, G. Cauzzi, J. L. Culhane, W. Curdt, J. M. Davila, G. D. Zanna, G. A. Doschek, S. Fineschi, A. Fludra, P. T. Gallagher, L. Green, L. K. Harra, S. Imada, D. Innes, B. Kliem, C. Korendyke, J. T. Mariska, V. Martínez-Pillet, S. Parenti, S. Patsourakos, H. Peter, L. Poletto, R. Rutten, U. Schühle, M. Siemer, T. Shimizu, H. Socas-Navarro, S. K. Solanki, D. Spadaro, J. Trujillo-Bueno, S. Tsuneta, S. V. Dominguez, J.-C. Vial, R. Walsh, H. P. Warren, T. Wiegelmann, B. Winter, and P. Young, LEMUR (Large European Module for solar Ultraviolet Research). European contribution to JAXAs Solar-C Mission, 13th European Solar Physics Meeting, Rhodes, Greece, September 12-16, 2011. (Oral).

L. Teriaca, F. Auchere, U. Schühle, S. Meining, and J.-P. Halain, Expected count-rates of the Extreme Ultraviolet Imager, 4th Solar Orbiter Workshop, Telluride, CO, United States, March 27-31, 2011. (Poster).

J. K. Thalmann, B. Inhester, and T. Wiegelmann, Estimating the magnetic energy and helicity in solar active regions, Sun 360, Stereo-4/SDO-2/SOHO-25 Workshop, Kiel, Jul 24-29, 2011. (Poster).

J. K. Thalmann, B. Inhester, and T. Wiegelmann, Estimating the relative helicity of coronal magnetic fields, 4th Solaire Network Meeting, Teistungen, Germany, May 10-13, 2011. (Poster).

J. K. Thalmann, T. Wiegelmann, X. Sun, J. T. Hoeksema, L. Y., and T. T., Nonlinear Force-Free Extrapolations of Vector-Magnetograms into the Corona, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Oral).

B. Thomas, H. Gibson, P. Hartogh, I. Mehdi, A. Maestrini, E. Schlecht, M. Phillip, M. Brandt, O. Cojocari, C. Lee, J. Gill, J. Siles, A. Walber, and S. Gulkis, MMIC Schottky based receiver technology for the Submillimetre Wave Instrument SWI- onboard EJSM/Laplace, 6th ESA Workshop on Millimetre-Wave Technology and Applications and 4th Global Symposium on Millimeter Waves, Espoo, Finland, May 23-25, 2011.

S. Tillier, S. de Raucourt, D. Mimoun, P. Lognonne, D. Giardini, U. R. Christensen, W. T. Pike, B. Banerdt, P. Lauder, L. Kerjean, K. J. Hurst, P. Zweifel, D. Mance, R. Roll, M. Bierwirth, J. Gagnepain-Beyneix, T. Nibut, O. Robert, T. Gabsi, O. Pot, B. Lecomte, P. Schibler, A. Mocquet, and R. Garcia, The GEMS-2 SEIS Experiment, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Poster).

G. P. Tozzi, P. Patriarchi, E. Mazzotta-Epifani, L. M. Lara, O. Hainaut, H. Boehnhardt, J. Brucato, D. Bó, J. Licandro, K. Meech, and P. Tanga, Ground Based Observations of Comet 103P/Hartley 2 at the time of EPOXI fly-by, EPSC-DPS Joint Meeting 2011, Nantes, France, Oct. 2-7, 2011. (Oral).

C. Tubiana, C. Snodgrass, J.-B. Vincent, L. Barrera, P. Nowajewski, G. Retamales, T. Lister, and H. Boehnhardt, 103P/Hartley 2: ground-based monitoring of the EPOXI flyby comet, EPSC-DPS Joint Meeting 2011, Nantes, France, Oct. 2-7, 2011. (Oral).

C.-Y. Tzou, N. Krupp, and W.-H. Ip, Energetic Particle Injection Events in the Saturnian Magnetosphere, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

T. van Wettum, S. Bingert, and H. Peter, Response of the corona to different heating mechanisms, 13th European Solar Physics Meeting, Rhodos, Greece, September 11-16, 2011. (Poster).

V. M. Vasiliūnas, Dynamical origin of ionospheric and Birkeland currents associated with the aurora, AGU Chapman Conference on The Relationship Between Auroral Phenomenology and Magnetospheric Processes, Fairbanks, Alaska, USA, February 27 – March 4, 2011. (Poster).

V. M. Vasiliūnas, Global Stress Balance of the Jovian Magnetotail, Magnetospheres of the Outer Planets 2011, Boston, Massachusetts, U.S.A., July 11-15, 2011. (Poster).

V. M. Vasiliūnas, Interrelationship of Substorms, Magnetic Storms, and Space Weather, 2011 International Conference on Storms, Substorms, and Space Weather, Hangzhou, China, September 18-23, 2011, invited paper. (Oral).

V. M. Vasiliūnas, Periodicities in Saturn's magnetosphere: An example of Murphy's law?, Magnetospheres of the Outer Planets 2011, Boston, Massachusetts, U.S.A., July 11-15, 2011. (Poster).

V. M. Vasiliūnas, The magnetospheres of Uranus and Neptune: what we know and what we don't know, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011, invited paper. (Oral).

V. M. Vasiliūnas, The magnetotail: An unsolved fundamental problem of magnetospheric physics, 9th Latin American Conference on Space Geophysics (COLAGE), Punta Leona, Puntarenas, Costa Rica, April 4-10, 2011, invited paper. (Oral).

V. M. Vasiliūnas, The magnetotail: an unsolved fundamental problem of magnetospheric physics, Space Physics seminar, Rice University, Houston, Texas, USA, April 12, 2011. (Oral).

V. M. Vasiliūnas, Time scale of the largest imaginable magnetic storm, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Oral).

V. M. Vasyliūnas, Two mechanisms for transmitting solar-wind electric fields to low latitudes, 9th Latin American Conference on Space Geophysics (COLAGE), Punta Leona, Puntarenas, Costa Rica, April 4-10, 2011. (Oral).

D. Verscharen and E. Marsch, Apparent temperature anisotropies due to wave activity in the solar wind, 478. WE-Heraeus-Seminar, "Fusion and Astrophysical Plasmas", Bad Honnef, Apr 17-20, 2011. (Oral).

D. Verscharen and E. Marsch, Compressive high-frequency waves riding on an Alfvén-cyclotron wave in a multi-fluid plasma, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

D. Verscharen and E. Marsch, Schwach kompressive, hochfrequente Wellen im inhomogenen Multifluid-Plasma, DGG-Jahrestagung 2011, Köln, February 21-24, 2011.

D. Verscharen, E. Marsch, U. Motschmann, and J. Müller, Compressive wave structures on kinetic scales resulting from a two-dimensional turbulent cascade in the solar wind, Cosmic Rays and the Heliospheric Plasma Environment, Bochum, Germany, September 12-16, 2011. (Oral).

D. Verscharen, E. Marsch, U. Motschmann, and J. Müller, Hybrid simulations of the two-dimensional cascade of weak solar wind turbulence beyond MHD scales, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Oral).

E. Vilenius, T. Müller, C. Kiss, A. Pal, P. Santos-Sanz, M. Rengel, P. Hartogh, S. Protopapa, M. Mueller, M. Mommert, J. Stansberry, E. Lellouch, H. Böhnhardt, R. Duffard, J. L. Ortiz, A. Thirouin, F. Henry, A. Delsanti, S. Fornasier, and D. Hestroffer, TNOs are Cool: Thermophysical modeling of a sample of 20 classical KBOs using Herschel/PACS, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

G. Villanueva, M. J. Mumma, R. E. Novak, Y. L. Radeva, H. U. Käufl, T. Encrenaz, and P. Hartogh, A Sensitive search for organics (C_2H_6 , CH_3OH , H_2CO , C_2H_2 , C_2H_4), water (H_2O , HDO), and nitrogen compounds (NH_3 , HCN , HC_3N) on Mars using ground-based high-resolution spectroscopy, EPSC-DPS Joint Meeting 2011, Nantes, France, October 2-7, 2011. (Oral).

J.-B. Vincent, L. M. Lara, and C. Tubiana, Spin and activity of comet 67P/Churyumov-Gerasimenko, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

J.-B. Vincent, S. Marchi, S. Besse, H. Bohnhardt, H. Sierks, M. Ahearn, F. Angrilli, C. Barbieri, A. Barucci, G. Cremonese, V. D. Deppo, B. Davidsson, S. Debei, M. D. Cecco, S. Fornasier, M. Fulle, O. Groussin, P. Gutierrez, S. F. Hviid, W.-H. Ip, H. U. Keller, J. R. Kramm, J. Knollenberg, D. Koschny, E. Kuehrt, M. Kueppers, P. Lamy, L. M. Lara, M. Lazzarin, J. J. Lopez-Moreno, S. Magrin, F. Marzari, M. Massironi, H. Michalik, G. Naletto, H. Rickman, R. Rodrigo, L. Sabau, N. Thomas, and K.-P. Wenzel, Physical properties of craters on asteroid (21)Lutetia, LPSC, Houston, USA, March 7-11, 2011. (Poster).

J.-B. Vincent, H. Sierks, and B. Weiss, Gravitational features of (21)Lutetia, evidence for differentiation ?, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Poster).

B. Walsh, E. Kronberg, P. W. Daly, et al., Cluster Guest Investigator special operation results: Energetic electrons along the high latitude magnetopause, Cluster 21st Workshop and ESLAB 2011, Brugge, Belgium, Sept. 19-23, 2011. (Oral).

J. Wei, M. Fraenz, E. Dubinin, J. Woch, R. Lundin, S. Barabash, and I. Dandouras, Enhanced atmospheric oxygen outflow on Earth and Mars driven by a corotating interaction region, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Poster).

J. Wicht, Flow and magnetic instabilities in the spherical Couette system, European Geosciences Union General Assembly, Vienna, Austria, Apr 3-8, 2011. (Poster).

J. Wicht, Flow and magnetic instabilities in the Spherical-Couette System, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Oral).

J. Wicht, Funktioniert mein Kompass auch auf dem Mars?, Sechsteilige Vortragsreihe für Kinder, Max-Planck Wissenswelten - Vorträge für junge Entdecker" des MPI für Dynamik und Selbstorganisation (MPIDS) und des MPI für Sonnensystemforschung (MPS), Katlenburg-Lindau, March 4, 2011. (Oral).

J. Wicht, Numerical simulations of the diverse planetary magnetic fields, 2nd PlanetMag Meeting, HKK Hotel, Wernigerode, 18-21, 2011. (Oral).

J. Wicht, K. Hori, W. Dietrich, and A. Manglik, Numerical models fo the Early Geodynamo, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011, invited. (Poster).

J. Wicht and P. Olson, Fluid flow and dynamo action driven by differential rotation in a spherical shell, European Planetary Science Congress 2011, Nantes, France, October 2-7, 2011. (Oral).

T. Wiegelmann, B. Inhester, J. Thalmann, T. Tadesse, J. Chifu, and J. de Patoul, Magnetic field structure in quiet solar regions from observations and extrapolations, 4th Solaire Network Meeting, Teistungen, May 9-13, 2011, invited Review. (Oral).

T. Wiegelmann, S. Solanki, J. Borrero, and The Sunrise Team, Evolution of the fine structure of magnetic fields in the quiet Sun: Combining Sunrise observations and modelling, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Oral).

T. Wiegelmann, J. Thalmann, B. Inhester, T. Tadesse, and I. Chifu, Data driven active region modelling from SDO and STEREO, Sun 360, Stereo-4/SDO-2/SOHO-25 Workshop, Kiel, July 25-29, 2011. (Oral).

T. Wiegelmann, J. Thalmann, B. Inhester, T. Tadesse, X. Sun, and T. Hoeksema, Force-free modeling of AR11158, Stanford seminar talk, Palo Alto/Stanford, December 1, 2011, invited. (Oral).

K. Wilhelm, Can the Pioneer anomaly be explained in the framework of a gravitational impact model?, 71. Jahrestagung der Deutschen Geophysikalischen Gesellschaft gemeinsam mit der Arbeitsgemeinschaft Extraterrestrische Forschung, Universität zu Köln, Physikalische Institute, Köln, February 21-24, 2011. (Oral).

S. Yao, E. Marsch, C. Tu, and R. Schwenn, Identification of prominece ejecta by the proton distribution function and magnetic fine structure in interplanetary coronal mass ejections in the inner heliosphere, 2011 ILWS Science Workshop "Towards the Next Solar Maximum", Beijing, China, Aug 28 - Sep 1, 2011. (Oral).

K. L. Yeo, S. K. Solanki, and N. A. Krivova, Comparing Irradiance Reconstructions from HMI Magnetograms with SORCE Observations, SORCE Science Meeting, Sedona, USA, September 13-16, 2011. (Poster).

K. L. Yeo, S. K. Solanki, and N. A. Krivova, Reconstructing Total Solar Irradiance from HMI/SDO Observations, LWS SDO Workshop, Squaw Valley, USA, May 1-5, 2011. (Poster).

E. Yiğit and A. S. Medvedev, Coupling of the lower atmosphere to the upper atmosphere via small/scale gravity waves, 4th IAGA/ICMA/CAWSES Workshop on Vertical Coupling in the Atmosphere/Ionosphere System, Prague, Czech Republik, February 14-18, 2011. (Oral).

E. Yiğit, A. S. Medvedev, A. D. Aylward, A. J. Ridley, M. J. Harris, M. B. Moldwin, and P. Hartogh, Dynamical effects of small-scale gravity waves of lower atmospheric origin on the equinoctial thermosphere, AGU Fall Meeting, San Francisco, USA, Dec 5-9, 2011. (Poster).

5. Seminare / *Seminars*

Teeseminar und Kolloquium / *Tea Seminar and Colloquium*

Vorträge von Gästen und eingeladenen Wissenschaftlern / *Talks by guests and invited scientists*

Piyali Chatterjee (NORDITA, Stockholm, Sweden), Alpha effect from the buoyancy instability of a magnetic layer, 21 Feb 2011

Rahul Sharma (Udaipur Solar Observatory, India), Identification of solar filament plasma within interplanetary medium by in-situ spacecraft, 22 Feb 2011

Girjesh Gupta (Indian Institute of Astrophysics, Bangalore, India), Propagating MHD waves in polar coronal hole regions, 23 Feb 2011

Günther Wuchterl (Landessternwarte Tautenburg, Germany), CoRoT: planet-formation and a physical theory of planetary mass, 2 Mar 2011

Gautam Narayan (Institute for Solar Physics, Stockholm, Sweden), Imaging spectropolarimetry of solar active regions, 3 Mar 2011

Alexander Pogoreltsev (Russian State Hydrometeorological University, St. Petersburg, Russia), Variability of planetary waves as a signature of climatic change, 21 Mar 2011

Marco Stangalini (Univ. degli Studi di Roma Tor Vergata, Rome, Italy), (I) Wavefront reconstruction for next generation solar telescopes (II) MHD waves in the Sun's atmosphere, 23 Mar 2011

Karri Muinonen (Astronomical Institute, University of Helsinki, Finland), Physical properties of solar-system regoliths from space-based imaging – Part I, 15 Apr 2011

Karri Muinonen (Astronomical Institute, University of Helsinki, Finland), Physical properties of solar-system regoliths from space-based imaging - Part II, 20 Apr 2011

Ludmilla Kolokolova (University of Maryland, College Park, USA), Integrated approach to remote sensing of dust in Solar system and beyond, 11 May 2011

Valentina Zharkova (Department of Mathematics, University of Bradford, UK), Particle acceleration in interacting magnetic loops: advances and constraints, 16 May 2011

Christoph Kuckein (Instituto de Astrofísica de Canarias, Tenerife, Spain), Evolution of an Active Region filament as observed in the photosphere and chromosphere simultaneously, 16 May 2011

Richard Wenzel (Institute for Astronomy, ETH Zurich, Switzerland), Sunspot umbra atmospheres, 18 May 2011

Nadine Nettelmann (Universität Rostock, Germany), Giant planets: far out, close-in, and deep inside, 18 May 2011

Stefano A. Livi (Southwest Research Institute, San Antonio, USA), Chemical Analysis of Mercury's Exosphere: the Strofio Sensor on BepiColombo, 20 May 2011

Alan Fitzsimmons (Queen's University, Belfast, UK), Low-resolution high-cadence studies of comets using the SuperWASP exoplanet facility, 27 May 2011

Brian Walsh (Boston University, USA), The magnetospheric cusp: a window for particle transport and source of energetic particles, 30 May 2011

Rita Traversi (University of Florence, Italy), Palaeoclimatic reconstructions from ice core chemical stratigraphies, 30 May 2011

Aikaterini Radioti (LPAP - Université de Liège, Belgium), Saturn's aurora seen with the eyes of HST and UVIS, 6 Jun 2011

Michael F. A'Hearn (University of Maryland, College Park, USA), Can comets tell us about planetary origins?, 9 Jun 2011

Tarje Nissen-Meyer (ETH Zurich, Switzerland), Imaging the deep earth with full seismic wavefields, 30 Jun 2011

Ed Cloutis (University of Winnipeg, Canada), Vesta and HEDs: What will Dawn Framing Camera see?, 14 Jul 2011

Roland Diehl (MPI für Extraterrestrische Physik), Radioactivities and their relation to Solar-System Astrophysics, 21 Jul 2011

Victor Hugo de la Luz Rodriguez (National Institute of Astrophysics, Optics, and Electronics (INAOE), Puebla, Mexico), The Chromospheric Solar Millimeter Cavity as a Result of the Temperature Minimum Region, 1 Sep 2011

Pankaj Kumar (Korea Astronomy and Space Science Institute, Daejeon, Rep. Korea), Initiation of Solar Flares/CMEs and Associated Phenomena, 14 Oct 2011

Kiran Jain (National Solar Observatory, Tucson, USA), How peculiar was the last solar minimum?, 17 Oct 2011

Durgesh Tripathi (Inter-University Centre for Astronomy and Astrophysics, Pune, India), Diagnostics of solar active regions, 19 Oct 2011

Andrea Opitz (IRAP, University of Toulouse, France), Solar wind structures in STEREO view, 21 Oct 2011

Sarah Sonnett (Institute for Astronomy - University of Hawaii, USA), Curious Lightcurves of Neutral Trans-Neptunian Objects, 22 Nov 2011

Mark Cheung (Lockheed Martin Solar and Astrophysics Laboratory, Palo Alto, USA), Simulations of Active Region Formation, 23 Nov 2011

Zhi Xu (Yunnan Astronomical Observatory, CAS, China), Introduction and new results of 1m New Vacuum Solar Telescope of China, 24 Nov 2011

Stephen Lowry (University of Kent, UK), Direct Observational Detections of the Asteroidal YORP Effect, 5 Dec 2011

Jingnan Guo (University of Genova, Italy), Energy dependent size of flare loops and particle acceleration diagnosed by RHESSI, 8 Dec 2011

Seminar der Sonnengruppe am MPS / *MPS Solar Group Seminar*

Vorträge von Mitgliedern der Sonnengruppe / *Talks by members of the Solar group*

Manfred Schüssler, Simulations of 'deep' convection and magneto-convection, 08 Mar 2011

Suguru Kamio, Diagnosing coronal loop dynamics, 15 Mar 2011

Rainer Moll, Vortices in simulations of solar surface convection, 22 Mar 2011

Miroslav Bártá, Energy cascades in large-scale solar-flare reconnection: Modelling and observations, 29 Mar 2011

Jeff Lee, Generation of anisotropic electron heating and turbulent anomalous transport in coronal flare loops, 05 Apr 2011

Werner Curdt, Chromospheric dynamics as observed in Lyman-Alpha, 12 Apr 2011

Hardi Peter, Catastrophic cooling in coronal loops, 19 Apr 2011

Sven Bingert, Scale invariant coronal heating, 03 May 2011

Davina Markiewicz-Innes, Observations of EUV sunspot jets and associated interplanetary electron beams, 17 May 2011

Michael Svanda, Validated helioseismic inversions for 3-D flows, 24 May 2011

Thomas Wiegelmans, Extrapolating time series of Sunrise magnetograms, 31 May 2011

Sofiane Bourouaine, Turbulence and ion kinetics of solar wind plasma, 05 Jul 2011

Julia Thalmann, Magnetic helicity of solar active regions, 12 Jul 2011

Robert Cameron, Ambipolar diffusion and Hall current effects near the solar surface, 26 Jul 2011

Werner Curdt, Helicity in spicules and explosive events, 06 Sep 2011

Robert Cameron, Quenching of the alpha effect in the Sun - what observations are telling us, 20 Sep 2011

Davina Markiewicz-Innes, Splashdown after the 7 June filament eruption, 29 Nov 2011

Hardi Peter, Why do coronal loops have constant cross section?, 06 Dec 2011

Natalie Krivova, Solar irradiance during the satellite era, 13 Dec 2011

Manfred Schüssler, Vortices, shocks, and heating in the solar photosphere: effect of a magnetic field, 20 Dec 2011

Seminar der Planetengruppe am MPS / MPS Planetary Group Seminar

Vorträge von Mitgliedern der Plametengruppe / *Talks by members of the Planetary group*

Elena Kronberg, Magnetospheric dynamics: the Cluster view, 25 Mar 2011

Fred Goesmann, Arctic Mars Analog Svalbard Expedition 2011, 9 Sep 2011

IMPRS Solar System Seminar (S³ Seminar)

Drei Vortäge von Doktoranden über das Thema ihrer Doktorarbeit

Three talks by students about their PhD project

Marc Hofmann, Shape modeling of small bodies and implications to granular flow on the surface of asteroid (21) Lutetia

Domenico Meduri, Statistical Analysis of Reversals: Geomagnetic Field and Dynamo Models
14 Dec 2011

Maria Andriopoulou, Energetic-particle kinematics in Saturn's inner magnetosphere

Kok Leng Yeo, Modelling Solar Irradiance

Julie Brisset, Suborbital Particle Aggregation and Collision Experiment (SPACE): Preparing for the flight on REXUS
7 Dec 2011

Armando Gonzalez, The origin of water in Jupiter stratosphere. Part III: Results

Chemedaa Tadese Ejeta, Polarimetric characterisation of Saturn's moon Iapetus

Philippe Bourdin, A solar corona model driven by photospheric observations of an active region
23 Nov 2011

Konstantin Finke, Simulations of the kinematic dynamo onset of spherical Couette flows

Bastian Gundlach, Heat conductivity of porous dust layers

09 Nov 2011

Daniel Verscharen, Parametric decay and kinetic cascade - spectral transfer in space plasmas

26 Oct 2011

Daniel Heyner, The feedback dynamo

Daniel Heißelmann, An experimental view on the collisional properties of water-ice particles in Saturn's rings

13 July 2011

Peter Kollmann, Saturn's radiation belts

Juanjo Piquerás, Camera development for PHI onboard Solar Orbiter

Wieland Dietrich, The convective origin of hemispherical dynamos

29 June 2011

Neda Dadashi, The quiet-Sun average Doppler shift of transition regions and coronal lines up to 2 MK

Jisesh Sethuradhan, Development of a General Circulation Model for the stratosphere of Jupiter

Bastian Gundlach, Experimental study of the outgassing of icy bodies in the Solar System

15 June 2011

Jonas Hesemann, Limb observations by Venus Monitoring Camera

Vedat Tanrıverdi, Spectral analysis of the induction equation

Jayant Joshi, Convection in sunspot penumbra

1 June 2011

Tino Riethmüller, Comparison of Bright Point properties between MHD simulations and Sunrise data

Benjamin Beeck, (Magneto-)Convection in Cool Stars

18 May 2011

Tijmen van Wettum, Heating the Solar Corona

Maria Dasi Espuig, Reconstruction of total solar irradiance since 1878

4 May 2011

Eugene Shalygin, Retrieving the surface emissivity from the Venus Monitoring Camera night-side infra-red images

Hendrik Kriegel, Influence of negatively charged plume grains on the structure of Enceladus' Alfvén wings: hybrid simulations versus Cassini MAG data

20 Apr 2011

Lucia Duarte, Explaining the simplicity of Saturn's magnetic field

Juan Sanchez, Phase angle and temperature-induced effect on the spectral analysis of asteroids

Ronny Lutz, Searching for exoplanets around post-RGB stars

2 Mar 2011

Navdeep Panesar, Clouds and hazes of Venus

Yeon Joo Lee, Radiative energy balance in the Venus cloud layer

Iulia Chifu, 3D reconstruction of CMEs

16 Feb 2011

Chemeda Ejeta, Spectropolarimetry of the two sides of Saturn's moon Iapetus

Konstantin Finke, Simulations of mechanically driven dynamos in spherical geometry

Christoph Koenders, Hybrid simulations of comet Churyumov-Gerasimenko

02 Feb 2011

Megha Bhatt, Derivation of the Iron Abundance Mapping Equation using SIR-2 data

Shahin Jafarzadeh, Structure and Dynamics of the Sunrise Ca II H Bright Points

David Bühler, Long-term variation of quiet-Sun magnetic flux patches

19 Jan 2011

6. Lehrtätigkeit / *Lectures*

Vorlesungen von MPS-Wissenschaftlern an Universitäten und anderen Institutionen *Lectures of MPS scientists at universities and other institutions*

Jörg Büchner: Physik der Sonne, Heliosphäre und des Weltraumwetters - Teil I (Georg August University Göttingen, WS 2010/11)

Physik der Sonne, Heliosphäre und des Weltraumwetters - Teil II (Georg August University Göttingen, SS 2011)

Physics of the Sun, Heliosphere and Space Weather - Key Knowledge (Georg August University Göttingen, WS 2011/12)

Computer simulation of space plasmas (University of Nanchang, October 2011)

Achim Gondorfer: Second International summer school on solar and stellar polarisation (Bamboo Sea, Yibin, China, 8 - 18 July 2011)

Laurent Gizon: Forschungsschwerpunkt: Astro- und Geophysik (Georg August Universität Göttingen, Germany; WS 2010/11 and WS 2011/12)

Introduction to Helioseismology (Georg August Universität Göttingen, Germany; WS 2011/12)

Harald Krüger: Entstehung von Sonnensystemen (Georg August University Göttingen, WS 2011/12)

Maria Lukitcheva: General Astronomy (Saint-Petersburg State University, Spring 2011)

Eckart Marsch: 5th El Leoncito International Solar Physics School (El Leoncito, Argentina, 7 - 13 February 2011)

Hardi Peter: Introduction to Plasmaphysics (Georg August University Göttingen, SS 2011)

Numerical Experiments in Astrophysics (Georg August University Göttingen, WS 2011/12)

Sami K. Solanki: Solar and Stellar Atmospheres (School of Space Research, Kyung-Hee University, Yongin, Korea, WS 2011/12)

IMPRS-Vorlesungen / *IMPRS Lectures*

Stellar Structure and Evolution, W. Glatzel, 4 – 8 April 2011

Planetary Interiors and Surfaces, U. Christensen, A. Nathues, W. Markiewicz, J.-B. Vincent, 23 – 27 May 2011

Retreat, Akademie Hofgeismar, 19 – 22 June 2011

How to write a scientific paper, M. Schüssler

How to write a grant proposal, K.-H. Glassmeier

Transients on the Sun and solar-terrestrial relations, R. Schwenn

Planet formation, J. Blum

Job application, D. Schmitt

IDL Intensive Seminar, W. Glatz, 6 – 8 July 20

7. Tagungen und Workshops *Conferences and workshop*

7.1 Organisation von Tagungen und Workshops *Organization of conferences and workshops*

Jörg Büchner: "Theory and Simulation of Solar System Plasmas" EGU general Assembly, Vienna, Austria, April 3-8, 2011

10th International School Symposium for Space Simulations (ISSS-10), Banff, Canada, July 24-31, 2011

4th International Solaire Network Meeting "Magnetic Field Emergence, Linkage, Reconnection, and Eruptions in the Solar Atmosphere", Teistungen, May 9-13, 2011

Ulrich Christensen: DAWN Science Team Meeting, Nördlingen, Germany, May 8-12, 2011

Laurent Gizon: PLATO PDC-SOC meeting, MPS, Katlenburg-Lindau, Germany, 8 March 2011

5th PLATO Data Centre meeting, MPS, Katlenburg-Lindau, Germany, 27-28 April 2011

Martin Hilchenbach: COSIMA Workshop, Vienna, Austria, Oct 24 - 28, 2011

Harald Krüger: Rosetta-SESAME Team Meeting, Katlenburg-Lindau, Germany, September 26-28, 2011

Eckart Marsch: 4th SOLAIRE Network Meeting, Teistungen, Germany, May 9 – 13, 2011

Johannes Wicht: PlanetMag Jahrestreffen, Wernigerode, Germany, October 18-21, 2011

7.2 Convener bei wissenschaftlichen Tagungen *Convener during scientific meetings*

Jörg Büchner: Annual meeting of the German Physical Society, Cologne, Germany, Feb 20 – 25, 2011;
Annual meeting German Society for Extraterrestrial Research, Cologne, Germany, Feb 20 – 25, 2011

Radislav Bucik: 32nd International Cosmic Ray Conference, Beijing, China, August 11 – 18, 2011

Ulrich Christensen: EGU, Vienna, Austria, April 3 - 8, 2011

Paul Hartogh: AOGS, Taipeh, Taiwan, August 8 – 12, 2011; EGU, Vienna, Austria, April 3 – 8, 2011

Urs Mall: AOGS 2011, Taipei, Taiwan, August 8 – 12, 2011

Wojciech Markiewicz: EGU, Vienna, Austria, April 3 - 8, 2011

Fatima Rubio: ISSI Team Meeting "Solar Chromospheric Flares", Bern, Switzerland, February 29, 2011; Reunion Fisica Solar, Granada, Spain, June 7 – 9, 2011

Johannes Wicht: EGU, Vienna, Austria, April 3 - 8, 2011

8. Gutachtertätigkeit für wissenschaftliche Zeitschriften *Reviews for scientific journals*

Insgesamt wurden mehr als 150 Artikel für wissenschaftliche Zeitschriften von 35 Wissenschaftlern des MPS begutachtet.

In total more than 150 articles for scientific journals were reviewed by 35 different scientists of the MPS.

Gutachter (in alphabetischer Reihenfolge)/ *Reviewer* (in alphabetical order):

H. Boehnhardt, J. Büchner, R. Bucik, U. Christensen, M. Fraenz, A. Gandorfer, L. Gizon, F. Goesmann, S. Haaland, J. Hirzberger, B. Inhester, D. Innes, N. Krivova, E. Kronberg, H. Krüger, N. Krupp, A. Lagg, M. Lukitcheva, U. Mall, W. Markiewicz, E. Marsch, H. Peter, M. Rengel, E. Roussos, F. Rubio, D. Schmitt, S. Schroeder, C. Snodgrass, S.K. Solanki, L. Teriaca, V. Vasylunas, Y. Wie, J. Wicht, T. Wiegemann, K. Wilhelm, J. Woch.

Zeitschriften (Anzahl Gutachten)/ *Journals (number of reviews)*:

Journal of Geophysical Research (25)

Advances in Space Research (18)

Geophysical Research Letters (15)

Astronomy & Astrophysics (11)

Annales Geophysicae (9)

Icarus (9)

Astrophysical Journal (8)

Planetary & Space Science (6)

Solar Physics (6)

Physical Review Letters (5)

Earth & Planetary Science Letters (4)

Physics of Plasmas (4)

Journal of Atmospheric and Solar-Terrestrial Physics, Nature, Physics of the Earth & Planetary Interiors, Science and Space Science Reviews (3 each)

Astronomical Journal, Geophysical & Astrophysical Fluid Dynamics and Nonlinear Processes in Geophysics (2 each)

Astrophysical Journal Letters, Astrophysics and Space Science, Atmospheric Chemistry and Physics, Earth, Moon and Planets, Geochemistry, Geophysics, Geosystems, Journal of Fluid Dynamics, Journal of selected Topics in Applied Earth Observations and Remote Sensing, Living Reviews in Solar Physics and Particulology (1 each)

9. Herausgebertätigkeit / *Editorship*

Regina Aznar Cuadrado: Living Reviews in Solar Physics (Scientific Editor)

Joerg Büchner: Nonlinear Processes in Geophysics (Editor), Advances in Space Research (Associate Editor)

Hermann Boehnhardt: Earth, Moon and Planets (Editorial Board)

Ulrich Christensen: Terrestrial magnetism (Editors: Hulot, G., Balogh, A., Christensen, U.R., Constable, C.G., Mandea, M., Olsen, N.), Springer, NYC, 2011

Paul Hartogh: Advances in Geophysics (Editor)

Eckart Marsch: Living Reviews in Solar Physics (Editorial Board)

Hardi Peter: Astronomy & Astrophysics (Editor)

Manfred Schüssler: Living Reviews in Solar Physics (Editorial Board)

Sami K. Solanki: Living Reviews in Solar Physics (Editor in Chief); Solar Physics (Editorial Board)

Johannes Wicht: International Journal of Geomathematics (Editor)

Klaus Wilhelm: Observing Photons in Space (Editors: M. C. E. Huber, A. Pauluhn, J. L. Culhane, J. G. Timothy, K. Wilhelm and A. Zehnder), ISSI, Bern, 2nd Edition, 2011

10. Mitgliedschaft in wissenschaftlichen Gremien

Membership in scientific councils

Jörg Büchner: Head of the “German Society for Extraterrestrial Research”; Head of the Extraterrestrial Physics Branch of the DPG (German Physical Society); Space Research Advisory Board of the Swedish National Space Board (SNSB); Advisory Committee “From Quantum to Cosmos”

Ulrich Christensen: Executive Committee of the International Association of Seismology and Physics of the Earth’s Interior (IASPEI)

Laurent Gizon: Board Member, PLATO Mission Consortium; Coordinator, Definition Phase Studies of PLATO Data Center; Collaborator, NASA SDO Science Center (Helioseismology); SOLAR-C Plan A Study Team; Board Member, European Helio- and Asteroseismology Network (HELAS); Co-I, Polarimetric and Helioseismic Imager (PHI) on Solar Orbiter; Elected Board Member, European Solar Physics Division (European Physical Society); Working Group Member, DLR/ESA ‘Gossamer Roadmap’ for solar sail technology; Deputy Board Member, Göttingen Research Campus; Board Member, Institute for Astrophysics, University of Goettingen.

Paul Hartogh: ALOMAR Scientific Advisory Committee (ASAC); Herschel Users' Group (HUG)

Eckart Marsch: DLR Gutachterausschuss

Hardi Peter: Commission on “Sun & Heliosphere” of the Arbeitsgemeinschaft Extraterrestrische Forschung (AEF); Board of the Solar Physics Division (SPD) of the European Physical Society (EPS); Commission 10 “Solar Activity” of the International Astronomical Union (IAU)

Miriam Rengel: OPC ESO Panel member; NASA Lunar Science Institute (NLSI); HIFI/Herschel Editorial Board

Sami K. Solanki: National Representative of SCOSTEP; European Space Science Committee (ESSC) of the European Science Foundation (ESF); Programme Commission "Extraterrestrial Physics" of

DLR; Scientific Advisory Committee of the HAO; Chairman of the Advisory Committee of the DWDG.

11. Auszeichnungen / *Awards*

Jörg Büchner: Appointed Distinguished Permanent Guest Professor; University of Nanchang, China

Laqurent Gizon: Annual Lecture of the Alexander von Humboldt Association in Bangalore, India

Elias Roussos: Outstanding Young Scientist - Division Planetary Sciences, EGU

Karsten Schindler: DGLR Young Professional Award, Deutsche Gesellschaft für Luft- und Raumfahrt (DGLR) / German Society for Aeronautics and Astronautics

Daniel Verscharen: Bester Vortrag junger Autoren auf der DGG-Jahrestagung Köln, Deutsche Geophysikalische Gesellschaft e.V.