



**Max-Planck-Institut
für Sonnensystemforschung**

*Max Planck Institute
for Solar System Research*

Tätigkeitsbericht 2013
Activity Report 2013



MAX-PLANCK-GESELLSCHAFT

Inhalt

Contents

1	Wissenschaftliche Zusammenarbeit	3
	<i>Scientific collaborations</i>	
1.1	Wissenschaftliche Gäste	3
	<i>Scientific guests</i>	
1.2	Aufenthalt von MPS-Wissenschaftlern an anderen Instituten	5
	<i>Stay of MPS scientists at other institutes</i>	
1.3	Projekte in Zusammenarbeit mit anderen Institutionen	6
	<i>Projects in collaboration with other institutions</i>	
2	Vorschläge und Anträge	27
	<i>Proposals</i>	
2.1	Projektvorschläge	27
	<i>Project proposals</i>	
2.2	Anträge auf Beobachtungszeit	29
	<i>Observing time proposals</i>	
2.2	Anträge auf Rechenzeit	29
	<i>Computing time proposals</i>	
3	Publikationen	30
	<i>Publications</i>	
3.1	Referierte Publikationen	30
	<i>Refereed publications</i>	
3.2	Doktorarbeiten	49
	<i>PhD theses</i>	
4	Vorträge und Poster	50
	<i>Talks and posters</i>	
5	Seminare	62
	<i>Seminars</i>	
6	Lehrtätigkeit	67
	<i>Lectures</i>	
7	Gutachtertätigkeit für wissenschaftliche Zeitschriften	68
	<i>Reviews for scientific journals</i>	

1. Wissenschaftliche Zusammenarbeit / *Scientific collaborations*

1.1 Wissenschaftlich Gäste (mit Aufenthalt ≥ 1 Woche)

Scientific guests (with stay ≥ 1 week)

- Dr. Vincezo Andretta** (INAF-Osservatorio Astronomico di Capodimonte, Napoli, Italy), 07 – 16 Dec (host: Teriaca)
- Dr. Miroslav Barta** (Astronomical Observatory of the Czech Academy of Sciences, Ondrejov, Czech Republic), 15 – 27 Apr, 13 – 20 Oct (host: Büchner)
- Prof. A. Basilevsky** (Vernadsky Institute for Analytical Chemistry and Geochemistry, Moscow, Russia), 01 Jul – 30 Nov (host: Markiewicz)
- Prof. Nikolay Borisov** (Institute of Terrestrial Magnetism, Ionosphere and Radio Waves Propagation (IZMIRAN), Troitsk, Russia), 20 Jul – 20 Aug (host: Fränz), 18 Nov – 14 Dec (host: Krüger)
- Dr. Lihui Chai** (University of Hefei, Hefei, China), 01 Jan – 20 Aug (host: Büchner)
- Prof. Dr. Gwangson Choe** (Kyung Hee University, Yongin, Korea), 24 Apr – 10 Jul (host: Büchner)
- Marine Claudel** (Institut Supérieur de l'Aéronautique et de l'Espace, Toulouse, France), 01 Jul – 23 Aug (host: Gizon)
- Dr. Andrzej Czechowski** (Space Research Centre, Warsaw, Poland), 01 Oct – 30 Nov (host: Hilchenbach)
- Ezequiel Echer** (Instituto Nacional Pesquisas Espaciais, Sao Jose Campos, Brazil), 22 - 27 Sep (host: Fränz)
- Dr. Alberto Flandes** (Universidad Nacional Autónoma de México), 26 May - 13 Jul (host: Krüger)
- Justine Gontier** (Institut Supérieur de l'Aéronautique et de l'Espace, Toulouse, France), 01 Jul – 23 Aug, (host: Gizon)
- Lija Guo** (Princeton Plasma Physics Lab, Princeton, USA), 01 – 29 Jun (host: Innes)
- Dr. Attila Hirn** (Center for Energy Research of the Hungarian Academy of Sciences, Budapest, Hungary), 20 Nov - 19 Dec (host: Krüger)
- Dr. N. Ignatiev** (Space Research Institute, Moscow, Russia), 01 – 30 Nov (host: Markiewicz)
- Emre Isik** (Istanbul Kultur University, Istanbul, Turkey), 17 - 31 Jan (host: Schüssler)
- Jie Jiang** (National Astronomical Observatories of the Chinese Academy of Sciences, Beijing, China), 18 - 30 Nov (host: Schüssler)
- Hyunnam Kim** (Kyung Hee University, Yongin, Korea), 15 Apr - 10 Jul, 10 Oct – 10 Dec (host: Lagg)
- Dr. Hiroshi Kimura** (Graduate School of Science, Kobe University, Kobe, Japan), 01 – 30 Sep (host: Hilchenbach)
- David Kramolis** (Jan Evangelista Purkyně University, Ústí nad Labem, Czech Republic), 14 Oct – 15 Nov (host: Büchner)
- Pankaj Kumar** (Korea Astronomy and Space Science Institute, Daejeon, Korea), 01 Jul – 16 Jul (host: Innes)
- Jesse Lord** (University of Colorado, Boulder, USA), 12 Apr – 11 May (host: Schüssler)
- Hao Luo** (Institute of Geology and Geophysics of the Chinese Academy of Sciences), 01 Nov 2012 - 01 Mar 2013 (host: Fränz)

- Dieter Nickeler** (Astronomical Institute of the Czech Academy of Science, Ondrejov, Czech Republic), 17 – 30 Nov (host: Wiegmann)
- Prof. Dr. Antonius Otto** (University of Fairbanks, Fairbanks, USA), 01 – 16 Jan (host: Büchner)
- Dr. John Paquette** (NASA Goddard Space Flight Center, Greenbelt, USA), 20 Sep - 02 Oct (host: Hilchenbach)
- Jinhye Park** (Kyung Hee University, Yongin, Korea), 26 Sep – 28 Oct (host: Innes)
- Dr. Elena Petrova** (Space Research Institute, Moscow, Russia), 01 Oct – 30 Nov (Markiewicz)
- Dr. Anatoly Remizov** (Space Research Institute, Moscow, Russia), 01 May – 31 Jul (host: Hilchenbach)
- Dr. Ilan Roth** (University of Berkeley, Berkeley, USA), 01 Aug – 20 Dec (host: Büchner)
- Dr. Jinhua Shen** (Xinjian Astronomy Observatory, Xinjiang, China), 10 Dec – 08 Jan 2014 (host: Wiegmann)
- Mimesh Sinha** (Indian School of Mines, Dhanbad, India), 08 May – 19 Jul (host: Krivova)
- Prof. Dr. Robert Stein** (Michigan State University, East Lansing, USA), 14 – 29 May (host: Gizon)
- Dr. Durgesh Tripathi** (Inter-University Centre for Astronomy and Astrophysics, Pune, India), 26 May - 24 Jun (host: Solanki)
- Vijin Venu** (Indian Institute of Technology, Kanpur, India), 28 Nov – 28 Dec (host: Gizon)
- Fabien Widmer** (Georg-August-Universität Göttingen, Göttingen, Germany), 01 Aug – 20 Dec (host: Büchner)
- Prof. Nobumitsu Yokoi** (University of Tokyo, Tokyo, Japan), 25 Aug – 01 Sep (host: Büchner)

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

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

Peter Barthol: ESRANGE Space Center, Kiruna, Sweden, Apr - June (repeated visits)

Hermann Böhnhardt: DLR, Institute for Space Systems, Bremen, Germany, 15 – 25 Apr

Jörg Büchner: University of Brasilia, Brazil, 01 – 08 Dec

Jörg Büchner: Space Research Institute of the Russian Academy of Science, Moscow/Petropavlovsk, Russia, 07 – 21 Sep

Jörg Büchner: University of California, Los Angeles/SanDiego, USA, 03 -15 Mar

Achim Gandorfer: ESRANGE Space Center, Kiruna, Sweden, Apr - June (repeated visits)

Laurent Gizon: Courant Institute of Mathematical Sciences, New York, USA, 19 Jul – 03 Aug

Laurent Gizon: Princeton University, Princeton, USA, 19 Jul – 03 Aug

Stein Haaland: National University of Ireland, Dublin, Ireland, 01 May – 01 Jun

Harald Krüger: Chiba Institute of Technology, Chiba, Japan, 25 Jul – 02 Aug

Miriam Rengel: University of Florence, Florence, Italy, 22 – 26 Oct

Don Schmit: High Altitude Observatory, Boulder, USA, 15 – 22 Feb

Nilda Oklay: Tübitak National Observatory, Anatolya, Turkey, 07 Dec 2013 – 02 Jan 2014

1.3 Projekte in Zusammenarbeit mit anderen Institutionen

Projects in collaboration with other institutions

3He-Rich Solar Energetic Particle Events

R. Bucik, U. Mall, A. Korth, and B. Inhester in collaboration with G. M. Mason (Applied Physics Laboratory, Johns Hopkins University, Laurel, USA); R. Gomez-Herrero (University of Alcalá, Alcalá de Henares, Spain); M. E. Wiedenbeck (Jet Propulsion Laboratory, Pasadena, USA).

A Search for Rising Magnetic Flux Concentrations

A. C. Birch in collaboration with D. Braun (NWRA, Boulder, USA); Y. Fan (HAO, Boulder, USA).

An Impact Model of the Electrostatic Force: Coulomb's Law revisited

K. Wilhelm in collaboration with B. N. Dwivedi (Indian Institute of Technology, Banaras Hindu University, Varanasi, India); H. Wilhelm (Cephalos Gesellschaft für Automatisierung mbH, Papenburg, Germany).

Analysis and calibration of historical Ca II spectroheliograms

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

Analysis and Cross-Calibration of Historical Sunspot Area Datasets

N. Krivova and S. K. Solanki in collaboration with N. Sinha (Indian School of Mines, Dhanbad, India); L. A. Balmaceda (Instituto de Ciencias Astronómicas, de la Tierra y del Espacio, San Juan, Argentina).

Analysis of Different Solar Spectral Irradiance Reconstructions and their Impact on Solar Heating Rates

N. Krivova in collaboration with G. Thuillier (Laboratoire Atmosphères, Millieux, Observations Spatiales, Paris, France); S. M. L. Melo (University of Toronto, Toronto, Canada); J. Lean (Naval Research Laboratory, Washington, USA); C. Bolduc, P. Charbonneau (Université de Montréal, Montréal, Canada); D. Bolsée (Institut d'Aéronomie Spatiale de Belgique, Brussels, Belgium); A. Shapiro, W. Schmutz (Physical Meteorological Observatory, Davos, Switzerland).

Application of MHD-equilibrium theory to Cluster data

E. Kronberg in collaboration with D. Nickeler (Astronomical Institute AV CR Ondřejov); E. Panov (Space Research Institute, Austrian Academy of Sciences, Graz, Austria).

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

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

Asymmetry of bipolar active regions

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

BEIRUS

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

BepiColombo – BELA (Laser Altimeter)

R. Kallenbach, U. Christensen, H. Perplies and M. Hilchenbach 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

Fossé, France); D. Resendes (Instituto Superior Técnico, Universidade Técnica de Lisboa, Lisboa, Portugal).

BepiColombo – MERTIS (Mercury Thermal Infrared Spectrometer)

U. Mall in collaboration with K. Jessberger (Universität Münster, Germany); DLR Institut für Planetenforschung (Berlin, Germany).

BepiColombo – MIXS

U. Christensen, 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. Fraenz, 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 – SERENA-PICAM (Planetary Ion CAMERA) – Detector unit of the Neutral and Charge Particle Analyzers SERENA (Search for Exospheric Refilling and Emitted Natural Abundances).

M. Fraenz, N. Krupp, and A. Loose in collaboration with S. Orsini (PI) (IFSI, Roma, Italy); K. Torkar (Institut für Weltraumforschung, Graz, Austria); J.-J. Berthelier (LPP-CNRS, St. Maur des Fosses, France); P. Escoubet (ESTEC, Noordwijk, The Netherlands); F. Leblanc (IPSL, Verrieres-Le-Buisson, France); K. Szego (Centre for Energy Research, Hungarian Academy of Sciences, 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, M. Andriopoulou, A. Kotova in collaboration with S. M. Krimigis, D. G. Mitchell, C. Paranicas, P. Kollmann (Applied Physics Laboratory, Johns Hopkins University, Laurel, MD, USA); D. Hamilton (University of Maryland, College Park, MD, USA); I. Dandouras (IRAP, Toulouse, France); T. P. Armstrong (Fundamental Technologies, Kansas, USA).

CAST (CERN Axion Solar Telescope)

S.K. Solanki in collaboration with CAST experiment team (CERN, Genève, Switzerland).

Castalia - Study of a mission to an Main Belt Comet

H. Boehnhardt and C. Snodgrass in collaboration with Fitzsimmons (Queens University, Belfast, UK); Braukhane, Hallmann (DLR SpaceSystems, Bremen, Germany); Homeister (OHB Company, Bremen, Germany); G. Jones (University College, London, UK); Herique, Kofman (University Grenoble, Grenoble, France); H. Hsieh (University of Hawaii, Hilo, USA); Alibert, Altwegg, Bieler, Schläppi (University Bern, Bern, Switzerland); Prialnik (University Tel Aviv, tel Aviv, Israel); Hainaut (ESO, Garching, Germany); Capria (INAF Rome, Rome, Italy); Miettinen, Pentilla, Zubko (University Helsinki, Helsinki, Finland); Fernando, Lara (IAA Granada, Granada, Spain); Bertini, Mazari (INAF Padova, Padova, Italy); Davidsson (University Uppsala, Uppsala, Sweden); Lowry (University Kent, Canterbury, England); Jehin (University Liege, Liege, Belgium); Licandro (IAC Tenerife, Santa Cruz, Spain); Bowles, Thomas (University Oxford, Oxford, England); Küppers (ESAC, Villafranca, Spain); Pätzold University Köln, Köln, Germany); Trieloff (University Heidelberg, Heidelberg, Germany).

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).

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

P.W. Daly and M. Rashev in collaboration with A. Masson, H. Laakso (ESA); C. H. Perry, J. Davies (RAL, Didcot, UK).

Cluster EDI revisited

S. Haaland in collaboration with M. Förster (Helmholtz-Zentrum Potsdam - Geoforschungszentrum, Potsdam, Germany).

Cluster II – CIS (Cluster Ion Spectrometer)

M. Fraenz, P.W. Daly, and E. Kronberg 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 – Cusp electrons

S. Haaland in collaboration with B. Walsh (Boston University, Boston, USA).

Cluster II – Ion outflow

S. Haaland and M. Fraenz in collaboration with M. Andre, A. Eriksson, E. Engwall (Uppsala University, Uppsala, Sweden); B. Lybekk, A. Pedersen (University of Oslo, Oslo, Norway); C. Johnsen, N. Ostgaard (University of Bergen, Bergen, Norway); M. Foerster (Geoforschungszentrum Potsdam, Potsdam, Germany); K. Li, H. Zhao, Q.Y. Ren (Chinese Academy of Science, Beijing, China); B. Sonnerup (Dartmouth College, Hanover, USA); G. Paschmann (Max-Planck Institut für extraterrestrische Physik, Garching, Germany).

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

P.W. Daly (PI), E. Kronberg, 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); H.S. Fu (IRF, Uppsala, 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); W.-L. Teh, R. Wang (IWF, Graz, Austria); K. Nykyrii (Embry-Riddle Aeronautical 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); I. Silin (University of Alberta, Canada).

Collaborative Research Center 963 "Astrophysical Flow Instabilities and Turbulence" - Asteroseismology and dynamos in solar-like stars

L. Gizon, E. Papini and H. Schunker in collaboration with University of Göttingen (Germany).

Collaborative Research Center 963 "Astrophysical Flow Instabilities and Turbulence" - From solar to heliospheric flows and instabilities

J. Büchner in collaboration with V. Bothmer (University of Göttingen, Germany).

Collaborative Research Center 963 "Astrophysical Flow Instabilities and Turbulence" - Magnetic fields and dynamos: from planets to low-mass stars

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

Collaborative Research Center 963 "Astrophysical Flow Instabilities and Turbulence" - Origin and structure of magnetic fields in cool stars

M. Schuessler in collaboration with A. Reiners (University of Göttingen, Germany).

Collaborative Research Center 963 "Astrophysical Flow Instabilities and Turbulence" - Simulation of reconnection and dynamo action in turbulent plasma flows

J. Büchner in collaboration with W. Schmidt (University of Göttingen, Germany).

Collaborative Research Center 963 "Astrophysical Flow Instabilities and Turbulence" - Solar turbulent convection probed by helioseismology

L. Gizon and J. Langfellner in collaboration with T. Hohage, D. Fournier, M. Holzke (University of Göttingen, Germany).

Comet ISON

H. Böhnhardt, W. Curdt, N. Oklay, C. Snodgrass, J.-B. Vincent in collaboration with U. Hopp, C. Ries, M. Schmidt (Ludwig-Maximilians-Universität München, Munich, Germany); B. Stecklum (Thüringer Landessternwarte, Tautenburg, Germany); L. Lara (Instituto de Astrofísica de Andalucía, Granada, Spain).

Comparative analysis of plasma environment at Mars and Venus

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

Comparative helioseismic study of Active Region 9787

L. Gizon, A. C. Birch and H. Schunker in collaboration with H. Moradi (Monash University, Australia), 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 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).

Computer Models of Solar Eruptions

J. Büchner in collaboration with J. Santos (University of Brazilia, Brazilia, Brazil).

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

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

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).

Cross-helicity dynamo models

D. Schmitt in collaboration with N. Yokoi (Institute of Industrial Science, Tokyo, Japan).

Database MBOSS2 on minor bodies in the outer solar system

H. Boehnhardt in collaboration with Olivier Hainaut (ESO, Garching, Germany); Silvia Protopapa (University of Maryland, College Park USA).

Dawn

A. Nathues, U. Christensen, P. Gutierrez, M. Hoffmann, I. Hall, L. Le Corre, V. Reddy, 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).

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.

C. Jarchow in collaboration with F.-J. Lübken (Leibniz- Institut für Atmosphärenphysik, Kühlungsborn, Germany).

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

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

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).

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, L. Rezac, and N. Krupp 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 Pallé (Instituto de Astrofísica de Canarias, Tenerife, Spain); E. Pascale (Cardiff University, UK); G. Wright (UK Astronomy Technology Centre, Edinburgh, UK).

Europa-Explorer

U. Christensen and N. Krupp in collaboration with DFKI (Bremen, Germany).

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), H. Steininger, W. Goetz, M. Hilchenbach, O. Roders, and E. Steinmetz in collaboration with Paul Mahaffy, Will Brinckerhoff (NASA GSFC, Greenbelt, 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 and S. K. Solanki 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).

First Time Comet Observations from TUG and Improvements on the Current Instrumentation

N. Oklay and J.-B. Vincent in collaboration with T. Özişik (Tubitak National Observatory, Antalya, Turkey)

Forward and inverse modeling in helio- and geophysics

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

Gaia-FUN-SSO from Tübitak National Observatory

N. Oklay and J.-B. Vincent in collaboration with T. Özişik (Tubitak National Observatory, Antalya, Turkey); Z. Eker (Akdeniz University, Antalya, Turkey); GGSG network Turkey.

Galileo – EPD (Energetic Particles Detector); Data analysis

N. Krupp, A. Lagg and E. Kronberg in collaboration with B. Mauk, C. Paranicas, A. Rymer (Applied Physics Laboratory, John Hopkins University, Laurel, USA); S. Kasahara (JAXA, Japan); K.K. Khurana (University of California, Los Angeles, USA); M. Freeman (British Antarctic Survey, GB); C. Jackman (University College London, GB); M. Vogt (University of Leicester, UK).

Geomagnetic field variability

U. Christensen in collaboration with V. Lesur, I. Wardinski (GeoForschungszentrum Potsdam, Germany).

Global Convective Dynamo Simulations of the Sun and other Stars

J. Warnecke in collaboration with A. Brandenburg (Nordic Institute for Theoretical Physics, Stockholm University, Stockholm, Sweden); P. Käpylä (University of Helsinki, Helsinki, Finland); M. Mantere (Aalto University, Espoo, Finland).

Gravitation and Shapiro effect

K. Wilhelm in collaboration with B. N. Dwivedi (Banaras Hindu University, Varanasi, India).

Gravitational redshift

K. Wilhelm in collaboration with B. N. Dwivedi (Banaras Hindu University, Varanasi, India).

GREGOR

A. Lagg, S. K. Solanki, A. Feller, A. Gandorfer, and J. Hirzberger 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 A. C. Birch in collaboration with J. Jackiewicz (New Mexico State University, USA); M. Svanda (Ondrejov Observatory, Czech Republic); T. Hohage (NAM, University of Göttingen, Germany).

Helioseismology of granulation

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

Helioseismology of the Solar Dynamo

A. C. Birch in collaboration with M. Woodard, A. Crouch (NWRA, Boulder, USA); J. Schou (Stanford University, Stanford, USA).

Helmholtz-Allianz "Planetary Evolution and Life"

H. Boehnhardt, J. Wicht and P. Hartogh and in collaboration with D. Breuer, H. Rauer (DLR- Institut für Planeten-forschung, 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, D. Kester, M. M. Mueller, 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); S. Beaulieu, C. McCoey, K. Edwards (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).

Hinode data analysis

A. Lagg, S. K. Solank, D. Bühler, Jayant Joshi, and Sanja Danilovic in collaboration with S. Tiwari (NASA Marshall Space Flight Center, Huntsville, USA) and National Astronomical Observatory of Japan (NAOJ).

HssO (Herschel Solar System Observations)

M. Rengel, P. Hartogh, C. Jarchow, L. Rezac 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. Bockelee-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.

Impact model of gravitation

K. Wilhelm in collaboration B. N. Dwivedi (Banaras Hindu University, Varanasi, India).

Impact simulations of asteroids and comets with Hydrocodes

N. Oklay and J.-B. Vincent in collaboration K. Wünnemann, D. Elbeshausen, (Natural History Museum, Leibniz Institute for Research on Evolution and Biodiversity, Berlin, Germany).

Influence of solar spectral irradiance on stratospheric ozone concentrations

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

InSight – SEIS

M. Bierwirth, U. Christensen, and B. Knapmeyer-Endrun 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. Laudet, L. Kerjean (CNES, Toulouse, France).

Interplanetary Micrometeoroid Environment for Exploration (IMEX)

H. Krüger in collaboration with R. Soja, R. Srama (Institut für Raumfahrtsysteme, Stuttgart, Germany); V. J. Sterken, E. Grün (Max Planck Institute for Nuclear Physics, Heidelberg, Germany).

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).

Ion Acceleration in the Magnetosphere

E. Kronberg; P. W. Daly; M. Fränz in collaboration with H. Luo (Key Laboratory of Ionospheric Environment, Chinese Academy of Sciences, Beijing, China); E. Grigorenko (Space Research Institute, Russian Academy of Sciences, Moscow, Russia).

ISSI Team " Heavy Ions: Their Dynamical Impact on the Magnetosphere"

E. Kronberg in collaboration with M. Ashour-Abdalla, Y. Shprits (University of California, Los Angeles, USA); I. Dandouras (Institut de Recherche en Astrophysique et Planétologie, France); D. Delcourt (Laboratoire de Physique des Plasmas, France); E. Grigorenko, D. Shklyar (Space Research Institute, Russia); L. Kistler (University of New Hampshire, USA); R. Maggiolo (Institut d'Aéronomie Spatiale de Belgique, Belgium); D. Welling (University of Michigan, USA).

ISSI Team "Kinetic Plasma Processes at Airless Bodies"

E. Roussos in collaboration with M. Fillingim, J. Halekas (University of California, Berkeley, USA); D. Brain (University of Colorado, Boulder, USA); W. Farrell (NASA Goddard Space Flight Center, USA); Y. Futaana, M. Holmström (Swedish Institute of Space Physics (IRF), Sweden); G. Jones (MSSL/UCL, UK); E. Kallio (Finnish Meteorological Institute, Finland); T. Nakagawa (Tohoku Technical University, Japan); Y. Saito (JAXA/ISAS, Japan).

ISSI Team "Understanding Solar Jets and their Role in Atmospheric Structure and Dynamics"

W. Curdt in collaboration with N. Raoufi (John Hopkins University, Baltimore, USA); E. Pariat (Observatoire de Paris, Paris, France); S. Patsourakos (University of Ioannina, Greece); S. Antiochos (NASA-GSFC, Washington, USA); V. Archontis (University of St. Andrews, UK); E. DeLuca (CFA, Cambridge, USA); H. Mason (University of Cambridge, Cambridge, UK); F. Moreno-Insertis (IAC, La Laguna, Spain); M. Shimojo (NAOJ Nobeyama, Nagano, Japan); T. Torok (PSI, San Diego, USA); A. Sterling (NASA-MSFC, Huntsville, USA).

JUICE (EJSM) -SWI

P. Hartogh, U. Christensen, C. Jarchow, M. Rengel, M. Fraenz, L. Rezac and A. Medvedev in collaboration with E. Lellouch, P. Drossart, R. Moreno, T. Fouchet, J.-M. Krieg, G. Beaudin, A. Maestrini (Observatoire de Paris, France); S. Barabash (IRF, Kiruna, Sweden) and others.

JUICE (EJSM)-GALA (Ganymede Laser Altimeter)

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

JUICE PEP JEI

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

KASC (Kepler Astero seismic Science Consortium)

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

Kinetic instability of a chain of magnetic islands

J. Büchner in collaboration with Ji Li (University of Science and Technology of China (USTC), Hefei, China).

LEMUR/EUVST (Large European Module for solar Ultraviolet Research; European contribution to Solar-C)

L. Teriaca, W. Curdt, D. Innes, H. Peter and S.K. Solanki 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); D. Hassler (Southwest Research Institute, Boulder, USA).

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. Fraenz, N. Krupp and Y. Wei in collaboration with R. Lundin (PI, Sweden); 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, Tucson, 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, S. Walter, S. van Gasselt (FU, Berlin, Germany); L. Petrova (IKI, Moscow, Russia); Dr. Dennis Reiss (University of Muenster, 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 Istituto 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).

Max-Planck-Princeton Research Center for Plasma Physics

S.K. Solanki, J. Büchner, D. Innes, H. Peter, N. Jain, D. Schmit and S. Bingert in collaboration with O. Grulke, S. Günter, V. Igochine, F. Jenko, K. Lackner, P. Lauber, W.-C. Müller (Max Planck Institute for Plasma Physics (IPP), Garching, Germany); H.-T. Janka, O. Just, E. Mueller (Max Planck Institute for Astrophysics (MPA), Garching, Germany); Guo Yong Fu, G. Hammett, H. Ji, S. Prager, M. Yamada (Princeton Plasma Physics Laboratory (PPPL), Princeton, USA); A. Burrows, J. Goodman, M. Kunz, E. Ostriker, A. Spitkovsky, J. Stone (Department of Astrophysical Sciences, Princeton University, Princeton, USA).

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).

MHD Equilibria

T. Wiegmann in collaboration with D. Nickeler (Astronomical Institute of the Czech Academy of Science, Ondřejov, Czech Republic).

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), M. B. Madsen (University of Copenhagen, Copenhagen, Denmark).

Multiscale reconnection at the Sun

J. Büchner in collaboration with Jun Lin (Yunnan National Observatory, CAS, Kunming, China).

NASA SDO Science Center: Developing Physics-Based Procedures for Probing Sunspots and Magnetic Regions

A. C. Birch, R. Burston, R. Cameron, L. Gizon, S. H. Hanasoge and H. Schunker in collaboration with D. Braun, A. Crouch (NWRA, Boulder, USA); J. Toomre, D. Haber, B. Hindman (JILA CU, Boulder, USA); T. Duvall (NASA GSFC, Greenbelt, USA); M. Rempel, Y. Fan, R. Centeno (HAO, Boulder, USA); P. Scherrer (Stanford University, Stanford, USA); J. Jackiewicz (NMSU, Las Cruces, USA).

New Generation Active Region Model

J. Thalmann and T. Wiegmann 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. Wiegmann, and B. Inhester in collaboration with C. J. Schrijver (LMSAL, Palo Alto, USA).

North-South Asymmetries

S. Haaland in collaboration with K. Laundal (University of Bergen, Bergen, Norway).

Observations and Modelling of Solar Spectral Irradiance from LYRA/PROBA2 and Picard/PREMOS

N. Krivova, K. L. Yeo, S. K. Solanki in collaboration with G. Cessateur, A. Shapiro, W. Schmutz (Physical Meteorological Observatory Davos, Davos, Switzerland); M. Kretschmar, M. Dominique (Observatoire Royal de Belgique, Brussels, Belgium); G. Thuillier (Laboratoire Atmosphères, Millieux, Observations Spatiales, Paris, France).

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).

Observing Photons in Space

K. Wilhelm in collaboration with C. Fröhlich (Physikalisch-Meteorologisches Observatorium Davos, Davos, Switzerland); J. G. Timothy (Nightsen Inc., Tiverton, USA); L. Xia (School of Space Science and Physics, Shandong University, China); M. C. E. Huber, A. Pauluhn, A. Zehnder (Paul-Scherrer-Institut, Villigen, Switzerland); J. L. Culhane (Mullard Space Science Laboratory, University College, London, UK).

Particle acceleration at the Sun

J. Büchner in collaboration with W. Gan, S. Liu (Purple Mountain National Observatory, CAS, Nanjing, China).

Photon in a Cavity - a Gedankenexperiment

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

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).

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, S. Solanki, N. Krivova in collaboration with European consortium led by C. Catala (Observatoire de Paris, Paris, France).

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

L. Gizon (coordinator), R. Burston, I. Pardowitz, and H. Schunker in collaboration with H. Moradi (Monash University, Australia); T. Stahn (University of Göttingen, Germany); 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). Gizon (coordinator), R. Burston, I. Pardowitz, H. Moradi, H. Schunker, and T. Stahn in collaboration with T. Appourchaux (IAS, Orsay, France); C. Catala, R. Samadi (Observatoire de Paris-Meudon, Paris, 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).

Point Spread Function of SDO/HMI and the Effects of Stray Light Correction on the Apparent Properties of Solar Surface Phenomena

A. Feller, K. L. Yeo, S. Danilovic, N. Krivova and S. K. Solanki in collaboration with S. Couvidat (Stanford University, Stanford, USA).

POLARIS (POLar Investigation of the Sun)

L. Gizon in collaboration with T. Appourchaux (IAS, Orsay, France), and others.

PROBA II – LYRA (Large Yield Radiometer)

U. Schühle in collaboration with M. Dominique, (PI), A. BenMoussa, D. Berghmans, V. Delouille, B. Nicula, B. Giordanengo, I. Dammasch, L. Wauters, R. Van der Linden, A. Zhukov, F. Clette (Royal Observatory of Belgium, Brussels, Belgium); W. Schmutz, M. Habereiter, M. Gyo, E. Rozanov, T. Egorova, A. Shapiro, G. Cessateur (Physikalisch-Meteorologisches Observatorium Davos, Davos, Switzerland); Y. Stockman, J.-M. Defise, J.-P. Halain, P. Rochus (Centre Spatial de Liège, Liège, Belgium); D. Gillotay, D. Fussen, 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, Th Dudok de Wit (CNRS, Orleans, France); 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 (PI), D. Seaton, B. Nicula, R. Van der Linden, A. Zhukov, F. Clette (Royal Observatory of Belgium, Brussels, Belgium); J.-P. Halain, J.-M. Defise, J. H. Lecat, P. Rochus, E. Mazy, T. Thibert (Centre Spatial de Liège, Liège, Belgium); J. Zender, A. De Groof, (ESA); S. Poedts, M. Sarp Yalim (Katholieke Universiteit Leuven, Belgium); P. Nicolosi, M. G. Pelizzo (University of Padova, Italy); V. Slemzin (Lebedev Physical Institute, Moscow, Russia); P. T. Gallagher, S. Bloomfield (Trinity College, Dublin, Ireland).

PROBA-3 – ASPIIC

W. Curdt and S.K. Solanki in collaboration with A. Mestrau-Garreau (ESTEC, Noordwijk, The Netherlands), P. Rochus (Centre Spatiale Liege, Belgium), A. Poulakidas (Hellenic Aerospace Industry, Greece), A. Paschalis (University of Athens, Greece), R. Peřestý (Aerospace Research and Test Establishment, Czech Republic), P. Heinzl (Astronomical Institute of the Academy of Science, Ondrejov, Czech Republic), H. Michalik (IDA, Braunschweig, Germany)

RAISE – Rapid Imaging Spectrograph Experiment

U. Schühle and S. Werner in collaboration with D. Hassler (PI), D. Slater, C. DeForest, G. Laurent (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).

Reconstruction of Solar Irradiance Using a Flux Transport Model

M. Dasi, N. Krivova, S. K. Solanki in collaboration with J. Jiang (Key Laboratory of Solar Activity, Chinese Academy of Sciences, Beijing, China).

Role of the Middle Atmosphere in Climate (ROMIC)

N. Krivova, S. K. Solanki, S. Danilovic, M. van Noort in collaboration with a German consortium led by F.-J. Lübken (Leibniz Institut für Atmosphärenphysik, Kühlungsborn, Germany).

Rosetta – CONSERT (Radio Tomography Project)

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

Rosetta – COSAC (PHILAE)

F. Goesmann and H. Boehnhardt 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) and H. Krüger in collaboration with K. Altwegg (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 Spatiale, Orsay, France); F. Rüdener (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 et de l'Espace (LPC2E), 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 – 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, J. Agarwal, I. Büttner, P. Gutierrez, I. Hall, N. Oklay, C. Snodgrass, C. Tubiana, and J.-B. Vincent in collaboration with C. Barbieri, 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. J. Lopez Moreno (Instituto de Astrofísica de Andalucía, Granada, Spain); D. Koschny, K.-P. Wenzel (ESTEC, Noordwijk, The Netherlands); M. F. A'Hearn, D. Bodewits (University of Maryland, College Park, 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 Astronomica de 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 – ROMAP

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

Rosetta – PHILAE (Rosetta Lander)

H. Boehnhardt and R. Roll in collaboration with S. Ullamec (DLR, Köln, Germany); J. P. Bibring (IAS, Paris, France); P. Gaudon (CNES, Toulouse, France).

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).

Rosetta-DIM (Dust Impact Monitor)

H. Krüger (PI) 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 Geofísica, UNAM, Coyoacán, Mexico).

SDO/HMI Multi-Height Velocity Measurements

K. Nagashima; B. Löptien; L. Gizon; A. C. Birch; R. Cameron; S. Danilovic in collaboration with S. Couvidat (Stanford University, Stanford, USA); B. Fleck (NASA, Greenbelt, USA); R. Stein (Michigan State University, East Lansing, USA).

SDO-based magnetic modeling of the solar corona

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

Secular Perihelion Advances of the Inner Planets and Asteroid Icarus

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

Seismic Constraints on Solar Convection

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

SELENE2-SEIS

M. Bierwirth in collaboration with N. Kobayashi, H. Shiraishi (JAXA Institute of Space and Astronautical Science, Tokyo, Japan); P. Lognonné, S. de Raucourt (Institute de Physique du Globe de Paris, Paris, France); P. Zweifel, D. Mance (ETH Zürich, Switzerland); D. Mimoun (Intitute Superieur de l'Aeronautique et de l'Espace, Toulouse, France)

Simulation of deep solar magneto-convection

M. Schuessler in collaboration M. Cheung (Lockheed Martin Solar and Astrophysical Lab, Palo Alto, USA); M. Rempel (High Altitude Observatory, Boulder, USA).

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 and R. Burston in collaboration with H. Moradi (Monash University, Australia); R. Bogart, P. H. Scherrer (Stanford University, USA).

SLAM - Solar Lower Atmosphere and Magnetism

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).

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 Raumfahrtsysteme, Universität Stuttgart, Germany).

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

M. Hilchenbach in collaboration with 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 (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 (Solar and Heliospheric Observatory) - SUMER/LASCO Bogart Mission

W. Curdt, S. K. Solanki, L. Teriaca, D. Innes, U. Schühle, D. Schmit, and K. Wilhelm in collaboration with E. Landi, U. Feldman, G. A. Doschek, P. Lemaire, A. H. Gabriel, J.-C. Vial, K. Bocchialini (Institut d'Astrophysique Spatiale, Orsay, France); J. Gurman (NASA GSFC, Greenbelt, USA); D. Hassler (SWRI, Boulder, USA); P. G. Judge (HAO, Boulder, USA); M. Carlsson (Institute of Theoretical Astrophysics, University of Oslo, Norway); B. N. Dwivedi (Institute of Technology, Banaras Hindu University, Varanasi, India); J. G. Doyle (Armagh Observatory, UK); P. Heinzel, S. Gunar (Astronomical Institute, Czech Academy of Science, Ondrejov, Czech Republic); E. Avrett, H. Tian (Harvard-Smithsonian Center for Astrophysics, Cambridge, USA); P. Schwartz (Tatranska Lomnica Observatory, Slovak Republic); M. Haberreiter (PMOD, Davos, Switzerland)

Solar Control of the Terrestrial Magnetotrail

R. Bučik in collaboration with A. Opitz, P. Kajdic (European Space Research and Technology Centre, Noordwijk, The Netherlands); J.-A. Sauvaud, B. Lavraud, C. Jacquy (Université de Toulouse, Toulouse, France); A. Klassen (Christian-Albrechts-Universität zu Kiel, Kiel, Germany); R. Gomez-Herrero (Universidad de Alcalá, Alcalá de Henares, Spain); L. M. Kistler (University of New Hampshire, Durham, USA); J. Luhmann (University of California, Berkeley, USA); G. M. Mason, Johns Hopkins University, Laurel, USA).

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 Cycle Properties and Surface-Field Reconstruction from Sunspot Observations by S. H. Schwabe (DFG)

M. Dasi Espuig, Nr. Krivova, S. K. Solanki, R. Cameron in collaboration with R. Arlt, H. Balthasar, C. Denker (Leibniz-Institut für Astrophysik, Potsdam, Germany); I. Usoskin, K. Mursula (University of Oulu, Oulu, Finland).

Solar Dynamics Observatory

L. Gizon and S. K. Solanki in collaboration with P. H. Scherrer, J. Schou (Stanford University, USA); S. Tomczyk (High Altitude Observatoy, 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 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. Wiegmann 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, S.K. Solanki and K.L. Yeo in collaboration with Y.C. Unruh, W. Ball (Imperial College, London, UK).

Solar observations with ALMA

S.K. Solanki and M. Lukicheva in collaboration S. White (Air Force Research Lab, Albuquerque, USA); M. Carlsson (Institute of Theoretical Astrophysics, Oslo, Norway).

Solar Orbiter: EUI

U. Schühle, W. Curdt, D. Innes, L. Teriaca, S. K. Solanki, J. Büchner, R. Aznar Cuadrado, S. Meining, K. Heerlein, R. Enge, B. Chares, S. Werner in collaboration with P. Rochus(PI), J. P. Halain, E. Renotte, J.-M. Gillis, A. Debaize, L. Rossi, T. Thibert, M. Thomé (Centre Spatial de Liège, Liège, Belgium);), D. Berghmans, A. BenMoussa, A. Zhukov, S. Parenti, B. Nicula, C. Verbeeck, (Royal Observatory of Belgium, Brussels, Belgium); L. Harra, J. Sun, D. Williams, L. van Driel-Gesztelyi, L. Green, S. Matthews, T. Kennedy, J. Tandy, P. Smith, A. Rouseau (Mullard Space Science Laboratories, London, UK); T. Appourchaux, F. Auchère, J.-C. Vial, E. Buchlin, G. Aulanier, C. Dumesnil, Y. Zhang (Institut d'Astrophysique Spatiale, Orsay, France), W. Schmutz, M. Habereiter, M. Gyo, D. Pfiffner (Physikalisch Meteorologisches Observatorium Davos, Switzerland); F. Delmotte, R. Mercier (Institut d'Optique, Orsay, France); K. Bonte (Katholieke Universiteit Leuven, Belgium); A. Gottwald, U. Kroth, C. Laubis, R.M. Klein, M. Richter, F. Scholze (Physikalisch-Technische Bundesanstalt, Berlin) .

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

L. Teriaca, U. Schühle, S. K. Solanki, R. Aznar Cuadrado, H. Peter, J. Staub in collaboration with E. Antonucci, G. Nicolini, S. Fineschi, L. Abbo, A. Bemporad, G. Capobianco, G. Crescenzo, G. Massone, D. Telloni (INAF Osservatorio Astronomico di Torino, Turin, Italy); G. Naletto, P. Nicolosi, F. Frassetto, M.-G. Pelizzo, L. Poletto, G. Tondello, P. Zuppella, E. Verroi (U. Padua); M. Romoli, M. Focardi, M. Pancrazi, F. Landini, M. Velli, G. Noci, M. Landini (U. Florence); D. Spadaro (Osservatorio Astrofisico di Catania); V. Andretta (Osservatorio Astronomico di Capodimonte); M. Uslenghi, S. Incorvaia, M. Fiorini (INAF-IASF Milano); V. Da Deppo (Consiglio Nazionale delle Ricerche, Italy); M. A. Malvezzi (U. Pavia); A. Ciaravella, F. Reale (U. Palermo); T. Strauss (INAF, Napoli); J. D. Moses (Naval Research Lab., USA); A. Berlicki, P. Heinzel (Astronomical Institute Acad. of Sciences, Czech Republic); F. Auchère, S. Parenti, J.-C. Vial (Insitut d'Astrophysique Spatiale, France); P. Lamy (Laboratoire d'Astrophysique de Marseille, France); K. Tsinganos, (U. Athens, Greece); A. Gabrielli, M. Castronuovo (Agenzia Spaziale Italiana, Italy); S. Cesare, M. Montabone, T. Schillaci (Thales Alenia Space, Torino, Italy); A. Sacchetti, D. Morea (Compagnia Generale per lo Spazio, Italy).

Solar Orbiter: PHI

S. K. Solanki, J. Woch, A. Feller, A. Gandorfer, L. Gizon, J. Hirzberger, A. Lagg, T. Riethmüller J. Schou, U. Schühle, R. Meller, R. Müller, J. Staub, U. Beckmann, S. Ramanath, R. Enge, K. Heerlein, J. Bischoff, P. Ferreira, J. Piqueras, S. Werner, I. Papagiannaki, W. Deutsch, B. Grauf, L. Guerrero, M. Kolleck, D. Oberdorfer, A. Zerr, in collaboration with J. C. del Toro Iniesta (Instituto de Astrofísica de Andalucía – CSIC, Granada, Spain), E. Sanchis Kilders (Universitat de València, Spain), D. Orozco Suárez (Instituto de Astrofísica de Canarias, La Laguna, Spain), A. Álvarez Herrero (Instituto Nacional de Técnica Aeroespacial, Torrejón de Ardoz, Spain), I. Pérez Grande (Instituto Univeritario de Microgravedad, Universidad Politécnica de Madrid, Spain), J. M. Gómez Cama (Universitat de Barcelona, Spain), T. Appourchaux (Institut d'Astrophysique Spatiale, Paris, France); W. Schmidt & R. Volkmer (Kiepenheuer-Institut für Sonnenphysik, Freiburg, Germany); H. Michalik & B. Fiethe (Institut für Datentechnik und Kommunikationsnetze, Technische Universität Braunschweig, Germany), G. Scharmer (Institute for Solar Physics, Stockholm, Sweden); M. Carlsson (Institute of Theoretical Astrophysics, University of Oslo, Norway). V. Martinez Pillet (National Solar Observatory, Sunspot, USA)

Solar Orbiter: SPICE

W. Curdt, U. Schühle, D. Innes, S. K. Solanki, L. Teriaca, H. Peter, S. Meining, R. Aznar Cuadrado, in collaboration with A. Fludra, D. Griffin, M. Caldwell, P. Eccleston, J. Cornaby, D. Drummond, W. Grainger, T. Drundy, C. Howe, K. Middleton, R. Parker, O. Poyntz Wright, B. Shaughnessy, I. Tosh, N. Waltham (Rutherford Appleton Lab., Didcot, UK); D. Hassler, C. DeForest, J. Andrews, E. Wilkinson, B. Walls, J. Hanley (Southwest Research Institute, Boulder, USA); J. Davila, S.K. Antiochos, T. Kucera, R. Thomas, J. Klimchuk (NASA GSFC, Washington DC, USA); T. Appourchaux, E. Buchlin, F. Auchère, J.-C. Vial, A. Philippon, A. Gabriel (Institut d'Astrophysique Spatiale, Orsay,

France); M. Carlsson, V. Hansteen, S.V.H. Haugan (Institute of Theoretical Astrophysics, University of Oslo, Norway); M. Gyo, M. Habereiter, D. Pfiffner, W. Schmutz (Physikalisch Meteorologisches Observatorium Davos, Switzerland); T. Feigl (Fraunhofer Institut für Angewandte Optik und Feinmechanik, Jena); A. Gottwald, U. Kroth, C. Laubis, R.M. Klein, M. Richter, F. Scholze (Physikalisch-Technische Bundesanstalt, Berlin).

Solar Spectral Irradiance Variability from ISS/SolACES, ISS/SOLSPEC and Picard/PREMOS

N. Krivova, K. L. Yeo in collaboration with G. Thuillier (Laboratoire Atmosphères, Millieux, Observations Spatiales, Paris, France); G. Schmitdke, Ch. Erhardt, B. Nikutowski (Fraunhofer-Institut für Physikalische Messtechnik, Freiburg, Germany); G. Cessateur, A. Shapiro, W. Schmutz, M. Habereiter (Physical Meteorological Observatory Davos, Davos, Switzerland); C. Bolduc, P. Charbonneau (Université de Montréal, Montréal, Canada); J. Lean (Naval Research Laboratory, Washington, USA); S. Melo (University of Toronto, Toronto, Canada); V. Delouille, B. Mamepeay (Solar-Terrestrial Centre of Excellence, Brussels, Belgium).

Solar Stereoscopy

B. Inhester and T. Wiegmann 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).

Solar-C: SUVIT Design and Science Definition

A. Feller, J. Hirzberger, A. Lagg, M. van Noort and S. K. Solanki in collaboration with K. Ichimoto (Kyoto University, Japan); Y. Katsukawa (National Astronomical Observatory of Japan).

Solar-cycle variation of rotation and meridional circulation

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

SOLARNET

S. K. Solanki, L. Gizon, A. Lagg, A. Feller and M. van Noort in collaboration Manuel Collados Vera (coordinator) (Instituto de Astrofísica de Canarias (IAC), La Laguna, Spain) and 32 other institutions in Europe.

SOLID

N.A. Krivova, M. Dasi, S.K. Solanki in collaboration with W. Schmutz, M. Habereiter, W. Finsterle, C. Wehrli, A. Shapiro, G. Cessateur (PMOD, Davos, Switzerland); A. Hauchecorne, G. Thuillier, J.-F. Hochedez (LATMOS, France); T. Dudok de Wit, M. Kretschmar, M. Schöll (LPC2E, France); V. Delouille, C. Verbeeck, L. Lefevre, C. Marqué (Royal Observatory of Belgium); R. Qahwaji, S Ipson, O. Nibouche (University of Bredford, UK); M. Weber, W. Chehade (Universität Bremen, Germany); Y. Unruh (Imperial College, London, UK); I. Ermolli (INAF Osservatorio di Roma, Italy); H. Mason, G. Del Zanna (University of Cambridge, UK); K. Tourpali, S. Misios (Aristotele University Thessaloniki).

Sources of the Solar Spectral Irradiance Variability

N. Krivova and S. K. Solanki in collaboration with A. Shapiro, W. Schmutz (Physical Meteorological Observatory, Davos, Switzerland); W. Ball, Y. Unruh (Imperial College London, London, UK).

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. Bučik 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).

STEREO – Space weather monitor for cosmic rays

R. Bucik, U. Mall, A. Korth and B. Inhester in collaboration with K. Kudela, I. Parnahaj (Institute of Experimental Physics, Slovak Academy of Sciences, Kosice, Slovakia).

Stratospheric O3 Changes during 2001-2012

N. Krivova and S. K. Solanki in collaboration with S. S. Dhomse, M. P. Chipperfield, W. Feng (University of Leeds, Leeds, UK); W. T. Ball, Y. C. Unruh, J. D. Haigh (Imperial College London, London, UK); A. K. Smith (National Center for Atmospheric Research, Boulder, USA).

Stratospheric Processes and their Role in Climate SOLARIS-HEPPA

N. Krivova, S. K. Solanki in collaboration with an international consortium of about 45 institutions

Structure of the Chromosphere and Transition Region: Coordinated DST-IRIS-SUMER observations

L. Teriaca in collaboration with G. Cauzzi (Osservatorio Astrofisico di Arcetri, Firenze, Italy); K. Reardon (National Solar Observatory, Sunspot, USA).

Structure of the solar chromosphere from mm wave data

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

Submillimeter-Heterodyne Characterization of comets with ground-based telescopes

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

SUIT on Aditya-L1

A. Gandorfer, S. K. Solanki, N. Krivova, T. Riethmüller in collaboration with an Indian consortium led by D. Thirpathi (Inter-University Centre for Astronomy and Astrophysics, Pune, India).

SUNRISE

S. K. Solanki, P. Barthol, A. Feller, A. Gandorfer, J. Hirzberger, A. Lagg, T. Riethmueller, T. Wiegelmann and F. Rubio da Costa in collaboration with V. Martínez-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).

Sunspot tilt angles

M. Dasi, N.A. Krivova, R. Cameron, S.K. Solanki in collaboration with T. Baranyi (Heliophysical Observatory of the Hungarian Academy of Sciences, Debrecen, Hungary).

Sunspots

A. Lagg, G. Narayan, and D. Bühler in collaboration with V. Martínez Pillet (Instituto de Astrofísica de Canarias, Tenerife, Spain) and S. Tiwari (NASA Marshall Space Flight Center, Huntsville, USA).

Suprathermal heavy ions in corotating interaction regions

R. Bucik, U. Mall and A. Korthin collaboration with G. M. Mason (Applied Physics Laboratory, Johns Hopkins University, Laurel, USA); B. Klecker (Max-Planck-Institut fuer Extraterrestrische Physik, Garching, Germany).

Surface exploration of Kuiper Belt Objects and Cometary Nuclei

H. Boehnhardt 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); L. Lara (Instituto de Astrofísica de Andalucía, Granada, Spain).

Surface magnetic field effects in local helioseismology

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

TNOs are cool

M. Rengel and P. Hartogh 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).

Tools for Local Helioseismology

A. C. Birch in collaboration with A. Crouch, B. Javornik, D. Braun (NWRA, Boulder, USA).

Towards a more complete Assessment of the Impact of Solar Variability on the Earth's Climate

N. Krivova and S. K. Solanki in collaboration with a European consortium led by T. Dudok de Wit (Université d'Orléans, Orléans, France); K. Matthes (Helmholtz-Zentrum für Ozeanforschung, Kiel, Germany); I. Ermolli (Osservatorio Astronomico di Roma, Monte Porzio Catone, Italy).

Towards a Self-Consistent Model of the Thermal Structure of Venus' Atmosphere

M. Rengel in collaboration with S. S. Limaye (University of Wisconsin, Madison, USA); D. Grassi, A. Migliorini (Agenzia Spaziale Italiana, Rome, Italy); T. Imamura (Japanese Aerospace Exploration Agency, Sagami-hara, Japan); S. Lebonnois (Laboratoire de Météorologie Dynamique, Paris, France); A. Mahieux, A. C. Vadaele (Belgian Institute for Space Aeronomy, Brussels, Belgium); F. Montmessin (Laboratoire Atmosphères, Milieux, Observations Spatiales, Verrières le Buisson, France); M. Pätzold, M. Sornig, S. Tellmann (Rheinisches Institut für Umweltforschung, Köln, Germany); I. Müller Wordag (Imperial College London, London, UK); L. Zasova, A. Rodin (Space Research Institute, Moscow, Russia); T. Clancy, B. Sandor (Space Science Institute, Boulder, USA); S. Bougher (University of Michigan, Ann Arbor, USA); C. Wilson (University of Oxford, Oxford, UK); T. Widemann (Université de Paris, Paris, France).

Towards Understanding the Solar Wind: Coupling Transient Activity from the Sun to the Heliosphere

T. Wiegmann in collaboration with E. K. J. Kilpua (University of Helsinki, Helsinki, Finland); M. S. Madjarska (Armagh Observatory, Armagh, Ireland).

Turbulence-Driven Formation of Magnetic Flux Concentrations

J. Warnecke in collaboration with A. Brandenburg, I. Rivero Losada (Nordic Institute for Theoretical Physics, Stockholm University, Stockholm, Sweden); N. Kleeorin, I. Rogachevski (Ben-Gurion University of the Negev, Be'er Sheva, Israel).

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).

Using SDO/HMI data to investigate the energization of the coronal magnetic field

A. C. Birch and L. Gizon in collaboration with G. Barnes, K.D. Leka, D. Braun (NWRA, Boulder, USA); M. Wheatland (University of Sydney, Sydney, Australia).

Variability of Sun-Like Stars

N. Krivova and S. K. Solanki in collaboration with A. Shapiro, W. Schmutz (Physical Meteorological Observatory, Davos, Switzerland); W. Ball, Y. Unruh (Imperial College London, London, UK).

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

M. Fraenz 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).

WASPAM / CAWSES

P. Hartogh and C. Jarchow in collaboration with G. Hansen (Norsk institutt for luftforskning, Tromsø, 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).

Wave propagation in inclined magnetic fields

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

Waves in the solar atmosphere

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

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*

Cluster Dawn-Dusk Asymmetries

selected

S. Haaland with J. Gjerloev (The Johns Hopkins University Applied Physics Laboratory, Baltimore, USA).

Cluster Ion Outflow

selected

S. Haaland

Cometary Activity Beyond the H₂O Snow Line

selected

H. Bönnhardt with L. Paganini, M. Mumma, G. Villanueva (Goddard Space Flight Center, Greenbelt, USA); U. Käufl (European Southern Observatory, Garching, Germany).

DynaCore - From the Sun to Stars - Interplay between Dynamo and Corona

Submitted to Marie Curie Intra-European Fellowships; selected

J. Warnecke, H. Peter

Hinode/Sunrise Joint Observations

selected

A. Lagg, T. Riethmüller, S. K. Solanki

Intrinsic and Induced Magnetic Fields of the Terrestrial Planets and their Influence on Atmospheric Escape and Water Inventory

Submitted to DFG Planetary Magnetism; not selected

M. Fränz, Y. Wei.

Is there Water Ice in the Asteroid Belt? Direct Detection of Gas from a Sublimating Main Belt

not selected

H. Bönnhardt, C. Snodgrass with O. Hainaut (European Southern Observatory, Garching, Germany); A. Fitzsimmons (Queens University, Belfast, UK).

Observing the Fate of Sungrazing Comet C/2012 S1 (ISON)

selected

N. O'Klay, J.-B. Vincent, H. Bönnhardt with L. Lara (Instituto de Astrofísica de Andalucía, Granada, Spain); T. Ak (Istanbul University, Istanbul, Turkey); Z. Y. Lin, W.-H. Ip (National Central University, Taiwan).

Particle Environment Package for JUICE

Submitted to ESA; selected

M. Fränz with S. Barabash (Swedish Institute of Space Physics, Kiruna, Sweden); P. Wurz (Universität Bern, Bern, Switzerland); P. Brandt (The Johns Hopkins University Applied Physics Laboratory, Baltimore, USA).

Precision In-Situ Molecular Analyzer for NASA 2020 to Mars

Submitted to NASA; pending

F. Goesmann with W. Brinckerhoff (Goddard Space Flight Center, Greenbelt, USA).

Probing the Fine Structure of Photospheric Magnetic Fields using Hinode/SOT

not selected

M. van Noort with P. H. Scherrer, A. Sainz Dalda (Leland Stanford Junior University, Stanford, USA); M. Cheung (Lockheed Martin Advanced Technology Center's Solar and Astrophysics Laboratory, Palo Alto, USA).

Response of Ion Energization and Escape from Mars to Solar Wind and Magnetic Field Variations. Coordinated Mars Express and MAVEN Observations

Submitted to NASA; not selected

M. Fränz, E. Dubinin.

Small-Scale Structure of Sunspots

not selected

M. van Noort

SUIT on Aditya-L1 Mission

selected

N. Krivova, A. Gandorfer, S. K. Solanki, T. Riethmüller with D. Thripathi et al. (Inter-University Centre for Astronomy and Astrophysics, Ganeshkind, India).

The Intriguing Nature of the Thermal Emission of the Eris/Dysnomia System: Unveiling Dysnomia

pending

M. Rengel, P. Harthog with K. Csaba, A. Pal (Konkoly Observatory, Konkoly, Hungary); T. Müller, E. Vilnius (Max-Planck-Institut für extraterrestrische Physik, Garching, Germany); E. Lellouch (Centre nationale de la recherche scientifique, Moudon, France); P. Santos-Sanz (Instituto de Astrofísica de Andalucía, Granada, Spain); M. Mommert (Northern Arizona University, Flagstaff, USA); A. Juhasz (Leiden Observatory, Leiden, Netherlands); R. Kneissl (European Southern Observatory, Garching, Germany).

Towards Understanding the Slow Solar Wind: Coupling Observations of Transient Activity from the Sun to the Heliosphere

not selected

T. Wiegmann with M. S. Madjarska (Armagh Observatory, Armagh, Ireland); E. K. J. Kilpua (University of Helsinki, Helsinki, Finland).

Towards Understanding the Slow Solar Wind: Linking Remote and In-Situ Observations

Submitted to Väisälä Foundation; selected

T. Wiegmann with M. S. Madjarska (Armagh Observatory, Armagh, Ireland); E. K. J. Kilpua (University of Helsinki, Helsinki, Finland).

Understanding the Variability of Solar and Stellar Radiative Fluxes (ASTRA)

Submitted to Marie Curie Intra-European Fellowships; selected

N. Krivova, S. K. Solanki with A. I. Shapiro (Physical Meteorological Observatory, Davos, Switzerland).

VTT/Gregor Observations

selected

A. Lagg, M. van Noort, A. Feller, S. K. Solanki.

What will Happen to Sungrazing Comet C/2012 S1 (ISON)?

selected

N. O'Keefe, J.-B. Vincent, H. Böhnhardt with L. Lara (Instituto de Astrofísica de Andalucía, Granada, Spain); T. Ak (Istanbul University, Istanbul, Turkey); Z. Y. Lin, W.-H. Ip (National Central University, Taiwan).

2.2 Anträge auf Beobachtungszeit / *Observing time proposals*

The Sungrazing Comet C/2012 S1 (ISON) after its Perihelion Passage within the Solar Corona

Submitted to Calar Alto Observatory; selected

H. Bönhardt with L. Lara (Instituto de Astrofísica de Andalucía, Granada, Spain).

Probing the Outgassing Activity of Comets C/2012 K1 (PanStarrs) and C/2013 A1 (Siding Spring)

Submitted to ESO; not selected

H. Bönhardt with L. Paganini, M. Mumma, G. Villanueva (Goddard Space Flight Center, Greenbelt, USA); U. Käufl (European Southern Observatory, Garching, Germany).

2.3 Anträge auf Rechenzeit / *Computing time proposals*

Simulations of Solar Dynamo Cycle and Differential Rotation

Submitted to PRACE; partially selected

J. Warnecke with P. Käpylä, E. Cole (Helsinki University, Helsinki, Finland); A. Brandenburg Nordita + Stockholm University, Stockholm, Sweden); M. Mantere (Aalto University, Espoo, Finland).

Coronal Ejections from Self-Consistent MHD Simulations

Submitted to CSC IT Center for Science, partially selected

J. Warnecke with P. Käpylä (Helsinki University, Helsinki, Finland).

3. Publikationen / *Publications*

3.1 Referierte Publikationen / *Refereed publications*

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

- E. Adamson, J. Büchner**, and A. Otto, On the role of current dissipation in the energization of coronal bright points, *Astron. & Astrophys.*, **557**, A118, doi:[10.1051/0004-6361/201321281](https://doi.org/10.1051/0004-6361/201321281), 2013.
- J. Agarwal**, D. Jewitt, and H. Weaver, Dynamics of Large Fragments in the Tail of Active Asteroid P/2010 A2, *Astrophys. J.*, **769**(1), 46, doi:[10.1088/0004-637X/769/1/46](https://doi.org/10.1088/0004-637X/769/1/46), 2013.
- D. Andrews, H. Opgenoorth, N. Edberg, M. André, **M. Fränz, E. Dubinin**, F. Duru, D. Morgan, and O. Witasse, Determination of local plasma densities with the MARSIS radar: Asymmetries in the high-altitude Martian ionosphere, *J. Geophys. Res.*, **118**, 6228–6242, doi:[10.1002/jgra.50593](https://doi.org/10.1002/jgra.50593), 2013.
- L. S. Anusha** and K. N. Nagendra, Multi-Dimensional Radiative Transfer to Analyze Hanle Effect In Ca II K line at 3933 Å, *Astrophys. J.*, **767**(2), 108, doi:[10.1088/0004-637X/767/2/108](https://doi.org/10.1088/0004-637X/767/2/108), 2013.
- A. Arellano Ferro, D. M. Bramich, R. F. Jaimes, S. Giridhar, N. Kains, K. Kuppuswamy, U. G. Jorgensen, K. A. Alsubai, J. M. Andersen, V. Bozza, P. Browne, S. C. Novati, Y. Damerdji, C. Diehl, M. Dominik, S. Dreizler, A. Elyiv, E. Giannini, K. Harpsoe, F. V. Hessman, T. C. Hinse, M. Hundertmark, D. Juncher, E. Kerins, H. Korhonen, C. Liebig, L. Mancini, M. Mathiasen, M. T. Penny, M. Rabus, S. Rahvar, D. Ricci, G. Scarpetta, J. Skottfelt, **C. Snodgrass**, J. Southworth, J. Surdej, J. Tregloan-Reed, C. Vilela, O. Wertz, and The MiNDSTEp Consortium, A detailed census of variable stars in the globular cluster NGC 6333 (M9) from CCD differential photometry, *Mon. Not. Roy. Astron. Soc.*, **434**(2), 1220–1238, doi:[10.1093/mnras/stt1080](https://doi.org/10.1093/mnras/stt1080), 2013.
- B. Beck, R. H. Cameron**, A. Reiners, and **M. Schüssler**, Three-dimensional simulations of near-surface convection in main-sequence stars I. Overall structure, *Astron. & Astrophys.*, **558**, A48, doi:[10.1051/0004-6361/201321343](https://doi.org/10.1051/0004-6361/201321343), 2013.
- B. Beck, R. H. Cameron**, A. Reiners, and **M. Schüssler**, Three-dimensional simulations of near-surface convection in main-sequence stars II. Properties of granulation and spectral lines, *Astron. & Astrophys.*, **558**, A49, doi:[10.1051/0004-6361/201321345](https://doi.org/10.1051/0004-6361/201321345), 2013.
- N. Bello González, **S. Danilovic**, and F. Kneer, On the structure and dynamics of Ellerman bombs Detailed study of three events and modelling of H α , *Astron. & Astrophys.*, **557**, A102, doi:[10.1051/0004-6361/201321632](https://doi.org/10.1051/0004-6361/201321632), 2013.
- A. BenMoussa, B. Giordanengo, S. Gissot, G. Meynants, X. Wang, B. Wolfs, J. Bogaerts, **U. Schühle**, G. Berger, A. Gottwald, C. Laubis, U. Kroth, and F. Scholze, Characterization of backside-illuminated CMOS APS prototypes for the Extreme Ultraviolet Imager on-board Solar Orbiter, *IEEE Transactions on Electron Devices*, **60**, 1701–1708, doi:[10.1109/TED.2013.2255103](https://doi.org/10.1109/TED.2013.2255103), 2013.
- A. BenMoussa, S. Gissot, B. Giordanengo, G. Meynants, X. Wang, B. Wolfs, J. Bogaerts, **U. Schühle**, G. Berger, A. Gottwald, C. Laubis, U. Kroth, F. Scholze, A. Soltani, and T. Saito, Irradiation damage tests on backside-illuminated CMOS APS prototypes for the Extreme Ultraviolet Imager on-board Solar Orbiter, *IEEE Transactions on Nuclear Science*, **60**, 3907–3914, doi:[10.1109/TNS.2013.2279550](https://doi.org/10.1109/TNS.2013.2279550), 2013.
- A. BenMoussa, S. Gissot, **U. Schühle**, G. D. Zanna, F. Auchère, S. Mekaoui, A. R. Jones, D. Walton, C. J. Eyles, G. Thuillier, D. Seaton, I. E. Dammasch, G. Cessateur, M. Meftah, V. Andretta, D. Berghmans, D. Bewsher, D. Bolsée, L. Bradley, D. S. Brown, P. C. Chamberlin, S. Dewitte, L. V. Didkovsky, M. Dominique, F. G. Eparvier, T. Foujols, D. Gillotay, B. Giordanengo, J.-P. Halain, R. A. Hock, A. Irbah, C. Jeppesen, D. L. Judge, M. Kretschmar, D. R. McMullin, B. Nicula, W. Schmutz, G. Ucker, S. Wieman, D. Woodraska, and T. N. Woods, On-Orbit Degradation of Solar Instruments, *Solar Phys.*, **288**, 389 – 434, doi:[10.1007/s11207-013-0290-z](https://doi.org/10.1007/s11207-013-0290-z), 2013.

- S. Besse, Y. Yokota, J. Boardman, R. Green, J. Haruyama, P. Isaacson, **U. Mall**, T. Matsunaga, M. Ohtake, C. Pieters, M. Staid, J. Sunshine, and S. Yamamoto, One Moon, many measurements 2: Photometric corrections, *Icarus*, **226**(1), 127–139, doi:[10.1016/j.icarus.2013.05.009](https://doi.org/10.1016/j.icarus.2013.05.009), 2013
- L. Bharti, J. Hirzberger, and S. K. Solanki**, Fine structures in the atmosphere above a sunspot umbra, *Astron. & Astrophys.*, **552**, L1, doi:[10.1051/0004-6361/201220777](https://doi.org/10.1051/0004-6361/201220777), 2013.
- M. Bierwirth**, Using single transients on the performance analysis of electrochemical noise amplifiers, *Materials and Corrosion – Werkstoffe und Korrosion*, **64** (8), 664–670, doi:[10.1002/maco.201206735](https://doi.org/10.1002/maco.201206735), 2013
- S. Bingert and H. Peter**, Nanoflare statistics in an active region 3D MHD coronal model, *Astron. & Astrophys.*, **550**, A30, doi:[10.1051/0004-6361/201220469](https://doi.org/10.1051/0004-6361/201220469), 2013.
- A. C. Birch**, D. C. Braun, K. D. Leka, G. Barnes, and B. Javornik, Helioseismology of Pre-emerging Active Regions. II. Average Emergence Properties, *Astrophys. J.*, **762**(2), 131, doi:[10.1088/0004-637X/762/2/131](https://doi.org/10.1088/0004-637X/762/2/131), 2013.
- J. L. Bishop, H. B. Franz, **W. Goetz**, D. F. Blake, C. Freissinet, **H. Steininger, F. Goesmann**, W. B. Brinckerhoff, S. Getty, V. T. Pinnick, P. R. Mahaffy, and D. M. Darby, Coordinated analyses of Antarctic sediments as Mars analog materials using reflectance spectroscopy and current flight-like instruments for CheMin, SAM and MOMA, *Icarus*, **224**(2), 309–325, doi:[10.1016/j.icarus.2012.05.014](https://doi.org/10.1016/j.icarus.2012.05.014), 2013.
- D. F. Blake, R. V. Morris, G. Kocurek, S. M. Morrison, R. T. Downs, D. Bish, D. W. Ming, K. S. Edgett, D. Rubin, **W. Goetz**, M. B. Madsen, R. Sullivan, R. Gellert, I. Campbell, A. H. Treiman, S. M. McLennan, A. S. Yen, J. Grotzinger, D. T. Vaniman, S. J. Chipera, C. N. Achilles, E. B. Rampe, D. Sumner, P.-Y. Meslin, S. Maurice, O. Forni, O. Gasnault, M. Fisk, M. Schmidt, P. Mahaffy, L. A. Leshin, D. Glavin, A. Steele, C. Freissinet, R. Navarro-Gonzalez, R. A. Yingst, L. C. Kah, N. Bridges, K. W. Lewis, T. F. Bristow, J. D. Farmer, J. A. Crisp, E. M. Stolper, D. J. D. Marais, P. Sarrazin, and The MSL Sci Team, Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow, *Science*, **341**(6153), 1239505, doi:[10.1126/science.1239505](https://doi.org/10.1126/science.1239505), 2013.
- P.-A. Bourdin, S. Bingert, and H. Peter**, Observationally driven 3D magnetohydrodynamics model of the solar corona above an active region, *Astron. & Astrophys.*, **555**, A123, doi:[10.1051/0004-6361/201321185](https://doi.org/10.1051/0004-6361/201321185), 2013.
- D. M. Bramich, K. Horne, M. D. Albrow, Y. Tsapras, **C. Snodgrass**, R. A. Street, M. Hundertmark, N. Kains, A. Arellano Ferro, R. Figuera Jaimes, and S. Giridhar, Difference image analysis: extension to a spatially varying photometric scale factor and other considerations, *Mon. Not. Roy. Astron. Soc.*, **428**(3), 2275–2289, doi:[10.1093/mnras/sts184](https://doi.org/10.1093/mnras/sts184), 2013.
- J. Brisset, D. Heißelmann**, S. Kothe, R. Weidling, and J. Blum, The suborbital particle aggregation and collision experiment (SPACE): Studying the collision behavior of submillimeter-sized dust aggregates on the suborbital rocket flight REXUS 12, *Rev. Sci. Inst.*, **84**(9), 094501, doi:[10.1063/1.4819443](https://doi.org/10.1063/1.4819443), 2013.
- R. Bugiolacchi, U. Mall, M. Bhatt**, S. McKenna-Lawlor, and K. Ullaland, From the Imbrium Basin to crater Tycho: The first regional spectral distribution map derived from SIR-2 near-infrared data, *Icarus*, **223**, 804–818, doi:[10.1016/j.icarus.2013.01.018](https://doi.org/10.1016/j.icarus.2013.01.018), 2013.
- D. Bühler, A. Lagg, and S. K. Solanki**, Quiet Sun magnetic fields observed by Hinode: Support for a local dynamo, *Astron. & Astrophys.*, **555**, A33 1–10, doi:[10.1051/0004-6361/201321152](https://doi.org/10.1051/0004-6361/201321152), 2013.
- B. J. Buratti, P. A. Dalba, M. D. Hicks, V. Reddy, M. V. Sykes, T. B. McCord, D. P. O'Brien, C. M. Pieters, T. H. Prettyman, L. A. McFadden, **A. Nathues, L. Le Corre**, S. Marchi, C. Raymond, and C. Russell, Vesta, vestoids, and the HED meteorites: Interconnections and differences based on Dawn Framing Camera observations, *J. Geophys. Res.*, **118**(10), 1991–2003, doi:[10.1002/jgre.20152](https://doi.org/10.1002/jgre.20152), 2013.
- R. Bučík, U. Mall, A. Korth**, G. M. Mason, and R. Gómez-Herrero, ³He-rich SEP events observed by STEREO-A, in: *Solar Wind 13*, vol. 1539 of *AIP Conf. Proc.*, pp. 139–142, 2013, doi:[10.1063/1.4811007](https://doi.org/10.1063/1.4811007).

- R. H. Cameron, M. Dasi-Espuig, J. Jiang, E. Işık, D. Schmitt, and M. Schüssler**, Limits to solar cycle predictability: Cross-equatorial flux plumes, *Astron. & Astrophys.*, **557**, A141, doi:[10.1051/0004-6361/201321981](https://doi.org/10.1051/0004-6361/201321981), 2013.
- R. H. Cameron and M. Schüssler**, No evidence for planetary influence on solar activity, *Astron. & Astrophys.*, **557**, A83, doi:[10.1051/0004-6361/201321713](https://doi.org/10.1051/0004-6361/201321713), 2013.
- T. Cavalié, H. Feuchtgruber, E. Lellouch, **M. de Val-Borro, C. Jarchow**, R. Moreno, **P. Hartogh**, G. Orton, T. Greathouse, F. Billebaud, M. Dobrijevic, L. M. Lara, **A. González**, and H. Sagawa, Spatial distribution of water in the stratosphere of Jupiter from Herschel HIFI and PACS observations, *Astron. & Astrophys.*, **553**, A21, doi:[10.1051/0004-6361/201220797](https://doi.org/10.1051/0004-6361/201220797), 2013.
- N. Chen, W.-H. Ip, and **D. Innes**, Flare-Associated Type III Radio Bursts and Dynamics of the EUV Jet from Sdo/Aia and Rhesi Observations, *Astrophys. J.*, **769**(2), 96, doi:[10.1088/0004-637X/769/2/96](https://doi.org/10.1088/0004-637X/769/2/96), 2013.
- J.-Y. Choi, C. Han, A. Udalski, T. Sumi, B. S. Gaudi, A. Gould, D. P. Bennett, M. Dominik, J.-P. Beaulieu, Y. Tsapras, V. Bozza, F. Abe, I. A. Bond, C. S. Botzler, P. Chote, M. Freeman, A. Fukui, K. Furusawa, Y. Itow, C. H. Ling, K. Masuda, Y. Matsubara, N. Miyake, Y. Muraki, K. Ohnishi, N. J. Rattenbury, To. Saito, D. J. Sullivan, K. Suzuki, W. L. Sweatman, D. Suzuki, S. Takino, P. J. Tristram, K. Wada, P. C. M. Yock, M. K. Szymanski, M. Kubiak, G. Pietrzynski, I. Soszynski, J. Skowron, S. Kozłowski, R. Poleski, K. Ulaczyk, L. Wyrzykowski, P. Pietrukowicz, L. A. Almeida, D. L. DePoy, S. Dong, E. Gorbikov, F. Jablonski, C. B. Henderson, K.-H. Hwang, J. Janczak, Y.-K. Jung, S. Kaspi, C.-U. Lee, U. Malamud, D. Maoz, D. McGregor, J. A. Munoz, B.-G. Park, H. Park, R. W. Pogge, Y. Shvartzvald, I.-G. Shin, J. C. Yee, K. A. Alsubai, P. Browne, M. J. Burgdorf, S. C. Novati, P. Dodds, X.-S. Fang, F. Finet, M. Glittrup, F. Grundahl, S.-H. Gu, S. Hardis, K. Harpsøe, T. C. Hinse, A. Hornstrup, M. Hundertmark, J. Jessen-Hansen, U. G. Jørgensen, N. Kains, E. Kerins, C. Liebig, M. N. Lund, M. Lundkvist, G. Maier, L. Mancini, M. Mathiasen, M. T. Penny, S. Rahvar, D. Ricci, G. Scarpetta, J. Skottfelt, **C. Snodgrass**, J. Southworth, J. Surdej, J. Tregloan-Reed, J. Wambsganss, O. Wertz, F. Zimmer, M. D. Albrow, E. Bachelet, V. Batista, S. Brilliant, A. Cassan, A. A. Cole, C. Coutures, S. Dieters, D. D. Prester, J. Donatowicz, P. Fouque, J. Greenhill, D. Kubas, J.-B. Marquette, J. W. Menzies, K. C. Sahu, M. Zub, D. M. Bramich, K. Horne, I. A. Steele, R. A. Street, and The MOA Collaboration, Microlensing Discovery of a Population of very Tight, very Low Mass Binary Brown Dwarfs, *Astrophys. J.*, **768**(2), 129, doi:[10.1088/0004-637X/768/2/129](https://doi.org/10.1088/0004-637X/768/2/129), 2013.
- E. A. Cloutis, M. R. M. Izawa, L. Pompilio, **V. Reddy**, H. Hiesinger, **A. Nathues**, P. Mann, **L. Le Corre**, E. Palomba, and J. F. Bell, III, Spectral reflectance properties of HED meteorites + CM2 carbonaceous chondrites: Comparison to HED grain size and compositional variations and implications for the nature of low-albedo features on Asteroid 4 Vesta, *Icarus*, **223**(2), 850–877, doi:[10.1016/j.icarus.2013.02.003](https://doi.org/10.1016/j.icarus.2013.02.003), 2013.
- E. A. Cloutis, P. Mann, M. R. M. Izawa, **A. Nathues, V. Reddy**, H. Hiesinger, **L. Le Corre**, and E. Palomba, The 2.5–5.1 μm reflectance spectra of HED meteorites and their constituent minerals: Implications for Dawn, *Icarus*, **225**(1), 581–601, doi:[10.1016/j.icarus.2013.04.022](https://doi.org/10.1016/j.icarus.2013.04.022), 2013.
- S. Danilovic, D. Röhrbein**, R. H. Cameron, and **M. Schüssler**, On the relation between continuum brightness and magnetic field in solar active regions, *Astron. & Astrophys.*, **550**, A118, doi:[10.1051/0004-6361/201219726](https://doi.org/10.1051/0004-6361/201219726), 2013.
- M. Dasi-Espuig, S. K. Solanki, N. A. Krivova, R. Cameron**, and T. Penuela, Sunspot group tilt angles and the strength of the solar cycle (vol 518, A7, 2010), *Astron. & Astrophys.*, **556**, C3, doi:[10.1051/0004-6361/201014301e](https://doi.org/10.1051/0004-6361/201014301e), 2013.
- J. de Patoul, B. Inhester**, and **R. Cameron**, Polar plumes' orientation and the Sun's global magnetic field, *Astron. & Astrophys.*, **558**, L4, doi:[10.1051/0004-6361/201322414](https://doi.org/10.1051/0004-6361/201322414), 2013.
- J. de Patoul, B. Inhester, L. Feng**, and **T. Wiegmann**, 2D and 3D Polar Plume Analysis from the Three Vantage Positions of STEREO/EUVI A, B, and SOHO/EIT, *Solar Phys.*, **283**, 207–225, doi:[10.1007/s11207-011-9902-7](https://doi.org/10.1007/s11207-011-9902-7), 2013.

- M. de Val-Borro**, M. Küppers, **P. Hartogh**, **L. Rezac**, N. Biver, D. Bockelée-Morvan, J. Crovisier, **C. Jarchow**, and G. L. Villanueva, A survey of volatile species in Oort cloud comets C/2001 Q4 (NEAT) and C/2002 T7 (LINEAR) at millimeter wavelengths, *Astron. & Astrophys.*, **559**, A48, doi:[10.1051/0004-6361/201322284](https://doi.org/10.1051/0004-6361/201322284), 2013.
- S. S. Dhomse, M. P. Chipperfield, W. Feng, W. T. Ball, Y. C. Unruh, J. D. Haigh, **N. A. Krivova**, **S. K. Solanki**, and A. K. Smith, Stratospheric O₃ changes during 2001–2010: the small role of solar flux variations in a chemical transport model, *Atmos. Chem. Phys.*, **13**(19), 10113–10123, doi:[10.5194/acp-13-10113-2013](https://doi.org/10.5194/acp-13-10113-2013), 2013.
- K. Dialynas, P. C. Brandt, S. M. Krimigis, D. G. Mitchell, D. C. Hamilton, **N. Krupp**, and A. M. Rymer, The extended Saturnian neutral cloud as revealed by global ENA simulations using Cassini/MIMI measurements, *J. Geophys. Res.*, **118**, 3027–3041, doi:[10.1002/jgra.50295](https://doi.org/10.1002/jgra.50295), 2013.
- W. Dietrich**, **D. Schmitt**, and **J. Wicht**, Hemispherical Parker waves driven by thermal shear in planetary dynamos, *EPL*, **104**(4), doi:[10.1209/0295-5075/104/49001](https://doi.org/10.1209/0295-5075/104/49001), 2013
- W. Dietrich** and **J. Wicht**, A hemispherical dynamo model: Implications for the Martian crustal magnetization, *Phys. Earth Planet. Inter.*, **217**, 10–21, doi:[10.1016/j.pepi.2013.01.001](https://doi.org/10.1016/j.pepi.2013.01.001), 2013.
- D. E. Dombroski, **A. C. Birch**, D. C. Braun, and **S. M. Hanasoge**, Testing Helioseismic-Holography Inversions for Supergranular Flows Using Synthetic Data, *Solar Phys.*, **282**(2), 361–378, doi:[10.1007/s11207-012-0189-0](https://doi.org/10.1007/s11207-012-0189-0), 2013.
- L. D. V. Duarte**, **T. Gastine**, and **J. Wicht**, Anelastic dynamo models with variable electrical conductivity: An application to gas giants, *Phys. Earth Planet. Inter.*, **222**, 22–34, doi:[10.1016/j.pepi.2013.06.010](https://doi.org/10.1016/j.pepi.2013.06.010), 2013.
- E. Dubinin**, **M. Fraenz**, **J. Woch**, T.-L. Zhang, Y. Wei, A. Fedorov, S. Barabash, and L. R., Toroidal and poloidal magnetic fields at Venus. Venus Express observations, *Planet. Space Sci.*, **87**, 19–29, doi:[10.1016/j.pss.2012.12.003](https://doi.org/10.1016/j.pss.2012.12.003), 2013.
- E. Dubinin**, **M. Fraenz**, T.-L. Zhang, **J. Woch**, **Y. Wei**, A. Fedorov, S. Barabash, and R. Lundin, Plasma in the Near Venus Tail: Venus Express Observations, *J. Geophys. Res.*, **118**, 7624–7634, doi:[10.1002/2013JA019164](https://doi.org/10.1002/2013JA019164), 2013.
- T. L. Duvall, Jr. and **S. M. Hanasoge**, Subsurface supergranular vertical flows as measured using large distance separations in time-distance helioseismology, *Solar Phys.*, **287**(1-2), 71–83, doi:[10.1007/s11207-012-0010-0](https://doi.org/10.1007/s11207-012-0010-0), 2013.
- N. J. T. Edberg, D. J. Andrews, O. Shebanits, K. Agren, J.-E. Wahlund, H. J. Opgenoorth, **E. Roussos**, P. Garnier, T. E. Cravens, S. V. Badman, R. Modolo, C. Bertucci, and M. K. Dougherty, Extreme densities in Titan's ionosphere during the T85 magnetosheath encounter, *Geophys. Res. Lett.*, **40**(12), 2879–2883, doi:[10.1002/grl.50579](https://doi.org/10.1002/grl.50579), 2013.
- T. Eisenbeiss, **M. Ammler-von Eiff**, T. Roell, M. Mugrauer, Ch. Adam, R. Neuhaeuser, T. O. B. Schmidt, and A. Bedalov, The Hercules-Lyra association revisited New age estimation and multiplicity study, *Astron. & Astrophys.*, **556**, A53, doi:[10.1051/0004-6361/201118362](https://doi.org/10.1051/0004-6361/201118362), 2013.
- C. Ejeta**, **H. Boehnhardt**, S. Bagnulo, K. Muinonen, L. Kolokolova, and G. P. Tozzi, Polarization of Saturn's moon Iapetus. II. Comparison of the dark and the bright sides, *Astron. & Astrophys.*, **549**, A61, doi:[10.1051/0004-6361/201220177](https://doi.org/10.1051/0004-6361/201220177), 2013.
- C. Ejeta**, K. Muinonen, **H. Boehnhardt**, S. Bagnulo, D. Kolokolova, L. and Guirado, and G. P. Tozzi, Polarization of Saturn's moon Iapetus. III. Models of the bright and the dark sides, *Astron. & Astrophys.*, **554**, A117, doi:[10.1051/0004-6361/201220467](https://doi.org/10.1051/0004-6361/201220467), 2013.
- I. Ermolli, K. Matthes, T. Dudok de Wit, **N. A. Krivova**, K. Tourpali, M. Weber, Y. C. Unruh, L. Gray, U. Langematz, P. Pilewskie, E. Rozanov, W. Schmutz, A. Shapiro, **S. K. Solanki**, and T. N. Woods, Re-

- cent variability of the solar spectral irradiance and its impact on climate modelling, *Atmos. Chem. Phys.*, **13**, 3945–3977, doi:[10.5194/acp-13-3945-2013](https://doi.org/10.5194/acp-13-3945-2013), 2013.
- C. P. Escoubet, J. Berchem, K. J. Trattner, F. Pitout, R. Richard, M. G. G. T. Taylor, J. Soucek, B. Grison, H. Laakso, A. Masson, M. Dunlop, I. Dandouras, H. Rème, A. Fazakerley, and **P. Daly**, Double cusp encounter by Cluster: double cusp or motion of the cusp?, *Ann. Geophys.*, **31**, 713–723, doi:[10.5194/angeo-31-713-2013](https://doi.org/10.5194/angeo-31-713-2013), 2013.
- T. Felipe, A. Crouch, and **A. C. Birch**, Numerical simulations of multiple scattering of the f-mode by flux tubes, *Astrophys. J.*, **775**, 74, doi:[10.1088/0004-637X/775/1/74](https://doi.org/10.1088/0004-637X/775/1/74), 2013.
- L. Feng**, **B. Inhester**, and W. Q. Gan, Kelvin-Helmholtz Instability of a Coronal Streamer, *Astrophys. J.*, **774**, 141–150, doi:[10.1088/0004-637X/774/2/141](https://doi.org/10.1088/0004-637X/774/2/141), 2013.
- L. Feng**, **B. Inhester**, and M. Mierla, Comparisons of CME Morphological Characteristics Derived from Five 3D Reconstruction Methods, *Solar Phys.*, **282**(1), 221–238, doi:[10.1007/s11207-012-0143-1](https://doi.org/10.1007/s11207-012-0143-1), 2013.
- L. Feng**, **T. Wiegmann**, Y. Su, **B. Inhester**, Y. P. Li, X. D. Sun, and W. Q. Gan, Magnetic Energy Partition between the Coronal Mass Ejection and Flare from AR 11283, *Astrophys. J.*, **765**, 37, doi:[10.1088/0004-637X/765/1/37](https://doi.org/10.1088/0004-637X/765/1/37), 2013.
- Y. R. Fernandez, M. S. Kelley, P. L. Lamy, I. Toth, O. Groussin, C. M. Lisse, M. F. A'Hearn, J. M. Bauer, H. Campins, A. Fitzsimmons, J. Licandro, S. C. Lowry, K. J. Meech, J. Pittichova, W. T. Reach, **C. Snodgrass**, and H. A. Weaver, Thermal properties, sizes, and size distribution of Jupiter-family cometary nuclei, *Icarus*, **226**(1), 1138–1170, doi:[10.1016/j.icarus.2013.07.021](https://doi.org/10.1016/j.icarus.2013.07.021), 2013.
- H. Feuchtgruber, E. Lellouch, G. Orton, T. de Graauw, B. Vandenbussche, B. Swinyard, R. Moreno, **C. Jarchow**, F. Billebaud, T. Cavalié, S. Sidher, and **P. Hartogh**, The D/H ratio in the atmospheres of Uranus and Neptune from Herschel-PACS observations, *Astron. & Astrophys.*, **551**, A126, doi:[10.1051/0004-6361/201220857](https://doi.org/10.1051/0004-6361/201220857), 2013.
- A. Flandes, **H. Krüger**, **A. Loose**, M. Sperl, K. J. Seidensticker, H.-H. Fischer, and W. Arnold, Dust Impact Monitor (DIM) onboard Rosetta/Philae: Comparison of experimental results and the theory behind the experiment, *Planet. Space Sci.*, **84**, 122–130, doi:[10.1016/j.pss.2013.05.016](https://doi.org/10.1016/j.pss.2013.05.016), 2013.
- L. Fletcher, I. G. Hannah, H. S. Hudson, and **D. E. Innes**, Flare Ribbon Energetics in the Early Phase of an SDO Flare, *Astrophys. J.*, **771**(2), 104, doi:[10.1088/0004-637X/771/2/104](https://doi.org/10.1088/0004-637X/771/2/104), 2013.
- K. Furusawa, A. Udalski, T. Sumi, D. P. Bennett, I. A. Bond, A. Gould, U. G. Jorgensen, **C. Snodgrass**, D. D. Prester, M. D. Albrow, F. Abe, C. S. Botzler, P. Chote, M. Freeman, A. Fukui, P. Harris, Y. Itow, C. H. Ling, K. Masuda, Y. Matsubara, N. Miyake, Y. Muraki, K. Ohnishi, N. J. Rattenbury, T. Saito, D. J. Sullivan, D. Suzuki, W. L. Sweatman, P. J. Tristram, K. Wada, P. C. M. Yock, M. Collaboration, M. K. Szymanski, I. Soszynski, M. Kubiak, R. Poleski, K. Ulaczyk, G. Pietrzynski, L. Wyrzykowski, J. Y. Choi, G. W. Christie, D. L. Depoy, S. Dong, J. Drummond, B. S. Gaudi, C. Han, L. W. Hung, K. H. Hwang, C. -U. Lee, J. McCormick, D. Moorhouse, T. Natusch, M. Nola, E. Ofek, R. W. Pogge, I. -G. Shin, J. Skowron, G. Thornley, J. C. Yee, K. A. Alsubai, V. Bozza, P. Browne, M. J. Burgdorf, S. C. Novati, P. Dodds, M. Dominik, F. Finet, T. Gerner, S. Hardis, K. Harpsoe, T. C. Hinse, M. Hundertmark, N. Kains, E. Kerins, C. Liebig, L. Mancini, M. Mathiasen, M. T. Penny, S. Proft, S. Rahvar, D. Ricci, G. Scarpetta, S. Schafer, F. Schonebeck, J. Southworth, J. Surdej, J. Wambsganss, R. A. Street, D. M. Bramich, I. A. Steele, Y. Tsapras, K. Horne, J. Donatowicz, K. C. Sahu, E. Bachelet, V. Batista, T. G. Beatty, J. P. Beaulieu, C. S. Bennett, C. Black, R. Bowens-Rubin, S. Brilliant, J. A. R. Caldwell, A. Cassan, A. A. Cole, E. Corrales, C. Coutures, S. Dieters, P. Fouque, J. Greenhill, C. B. Henderson, D. Kubas, D (Kubas, D.); J. B. Marquette, R. Martin, J. W. Menzies, B. Shappee, A. Williams, D. Wouters, J. Van Saders, R. Zellem, M. Zub, Ogle Collaboration, FUN Collaboration, Mindstep Consortium, RoboNet Collaboration, Planet Collaboration, MOA-2010-BLG-328Lb: A Sub-Neptune orbiting very late M dwarf? *Astrophys. J.*, **779**(2), doi:[10.1088/0004-637X/779/2/91](https://doi.org/10.1088/0004-637X/779/2/91), 2013

- T. Gastine**, J. Morin, **L. Duarte**, A. Reiners, **U. R. Christensen**, and **J. Wicht**, What controls the magnetic geometry of M dwarfs?, *Astron. & Astrophys.*, **549**, L5, doi:[10.1051/0004-6361/201220317](https://doi.org/10.1051/0004-6361/201220317), 2013.
- T. Gastine**, **J. Wicht**, and J. M. Aurnou, Zonal flow regimes in rotating anelastic spherical shells: An application to giant planets, *Icarus*, **225**(1), 156–172, doi:[10.1016/j.icarus.2013.02.031](https://doi.org/10.1016/j.icarus.2013.02.031), 2013.
- F. Giannattasio, **M. Stangalini**, D. Del Moro, and F. Berrilli, On the asymmetry of velocity oscillation amplitude in bipolar active regions, *Astron. & Astrophys.*, **550**, A47, doi:[10.1051/0004-6361/201220103](https://doi.org/10.1051/0004-6361/201220103), 2013.
- C. Giri**, **F. Goesmann**, C. Meinert, A. C. Evans, U. J. Meierhenrich, UJ, Synthesis and Chirality of Amino Acids Under Interstellar Conditions, in: *Biochirality: Origins and molecular recognition* (edited by P. Cintas), vol. 333 of *Topics in Current Chemistry*, pp 41-82, doi:[10.1007/128_2012_367](https://doi.org/10.1007/128_2012_367), 2013
- L. Gizon**, J. Ballot, E. Michel, **T. Stahn**, G. Vauclair, H. Bruntt, P.-O. Quirion, O. Benomar, S. Vauclair, T. Appourchaux, M. Auvergne, A. Baglin, C. Barban, F. Baudin, M. Bazot, T. Campante, C. Catala, W. Chaplin, O. Creevey, S. Deheuvels, N. Dolez, Y. Elsworth, R. García, P. Gaulme, S. Mathis, S. Mathur, B. Mosser, C. Régulo, I. Roxburgh, D. Salabert, R. Samadi, K. Sato, G. Verner, **S. Hanasoge**, and K. R. Sreenivasan, Seismic constraints on rotation of Sun-like star and mass of exoplanet, *PNAS*, **110**(33), 13267–13271, doi:[10.1073/pnas.1303291110](https://doi.org/10.1073/pnas.1303291110), 2013.
- A. Gould, J. C. Yee, I. A. Bond, A. Udalski, C. Han, U. G. Jorgensen, J. Greenhill, Y. Tsapras, M. H. Pinsonneault, T. Bensby, W. Allen, L. A. Almeida, M. Bos, G. W. Christie, D. L. DePoy, S. Dong, B. S. Gaudi, L.-W. Hung, F. Jablonski, C.-U. Lee, J. McCormick, D. Moorhouse, J. A. Munoz, T. Natusch, M. Nola, R. W. Pogge, J. Skowron, G. Thornley, F. Abe, D. P. Bennett, C. S. Botzler, P. Chote, M. Freeman, A. Fukui, K. Furusawa, P. Harris, Y. Itow, C. H. Ling, K. Masuda, Y. Matsubara, N. Miyake, K. Ohnishi, N. J. Rattenbury, To. Saito, D. J. Sullivan, T. Sumi, D. Suzuki, W. L. Sweatman, P. J. Tristram, K. Wada, P. C. M. Yock, M. K. Szymanski, I. Soszynski, M. Kubiak, R. Poleski, K. Ulaczyk, G. Pietrzynski, L. Wyrzykowski, K. A. Alsubai, V. Bozza, P. Browne, M. J. Burgdorf, S. C. Novati, P. Dodds, M. Dominik, F. Finet, T. Gerner, S. Hardis, K. Harpsøe, F. V. Hessman, T. C. Hinse, M. Hundertmark, N. Kains, E. Kerins, C. Liebig, L. Mancini, M. Mathiasen, M. T. Penny, S. Proft, S. Rahvar, D. Ricci, K. C. Sahu, G. Scarpetta, S. Schaefer, F. Schoenebeck, **C. Snodgrass**, J. Southworth, J. Surdej, J. Wambsganss, R. A. Street, K. Horne, D. M. Bramich, I. A. Steele, M. D. Albrow, E. Bachelet, V. Batista, T. G. Beatty, J.-P. Beaulieu, C. S. Bennett, R. Bowens-Rubin, S. Brilliant, J. A. R. Caldwell, A. Cassan, A. A. Cole, E. Corrales, C. Coutures, S. Dieters, D. D. Prester, J. Donatowicz, P. Fouque, C. B. Henderson, D. Kubas, J.-B. Marquette, R. Martin, J. W. Menzies, B. Shappee, A. Williams, J. van Saders, M. Zub, and The Fun Collaboration, MOA-2010-BLG-523: "Failed Planet" = RS CVn STAR, *Astrophys. J.*, **763**(2), 141, doi:[10.1088/0004-637X/763/2/141](https://doi.org/10.1088/0004-637X/763/2/141), 2013.
- O. Grasset, M. K. Dougherty, A. Coustenis, E. J. Bunce, C. Erd, D. Titov, M. Blanc, A. Coates, P. Drossart, L. N. Fletcher, H. Hussmann, R. Jaumann, **N. Krupp**, J.-P. Lebreton, O. Prieto-Ballesteros, P. Tortora, F. Tosi, and T. V. Hoolst, JUper ICy moons Explorer (JUICE): An ESA mission to orbit Ganymede and to characterise the Jupiter system, *Planet. Space Sci.*, **78**, 1–21, doi:[10.1016/j.pss.2012.12.002](https://doi.org/10.1016/j.pss.2012.12.002), 2013.
- E. E. Grigorenko, H. V. Malova, A. V. Artemyev, O. V. Mingalev, **E. A. Kronberg**, R. Koleva, **P. W. Daly**, J. B. Cao, J.-A. Sauvaud, C. J. Owen, and L. M. Zelenyi, Current sheet structure and kinetic properties of plasma flows during a near-Earth magnetic reconnection under the presence of a guide field, *J. Geophys. Res.*, **118**, 3265–3287, doi:[10.1002/jgra.50310](https://doi.org/10.1002/jgra.50310), 2013.
- G. R. Gupta**, S. Subramanian, D. Banerjee, M. S. Madjarska, and J. G. Doyle, Nature of Quiet Sun Oscillations Using Data from the Hinode, TRACE, and SOHO Spacecraft, *Solar Phys.*, **282**(1), 67-86, doi:[10.1007/s11207-012-0146-y](https://doi.org/10.1007/s11207-012-0146-y), 2013
- S. Haaland** and J. Gjerloev, On the relation between asymmetries in the ring current and magnetopause current, *J. Geophys. Res.*, **118**, 7593–7604, doi:[10.1002/2013JA019345](https://doi.org/10.1002/2013JA019345), 2013.
- C. Han, Y. K. Jung, A. Udalski, T. Sumi, B. S. Gaudi, A. Gould, D. P. Bennett, Y. Tsapras, M. K. Szymanski, M. Kubiak, G. Pietrzynski, I. Soszynski, J. Skowron, S. Kozłowski, R. Poleski, K. Ulaczyk, L. Wyrzykowski,

- P. Pietrukowicz, F. Abe, I. A. Bond, C. S. Botzler, P. Chote, M. Freeman, A. Fukui, K. Furusawa, P. Harris, Y. Itow, C. H. Ling, K. Masuda, Y. Matsubara, Y. Muraki, K. Ohnishi, N. J. Rattenbury, T. Saito, D. J. Sullivan, W. L. Sweatman, D. Suzuki, P. J. Tristram, K. Wada, P. C. M. Yock, V. Batista, G. Christie, J.-Y. Choi, D. L. DePoy, S. Dong, K.-H. Hwang, A. Kavka, C.-U. Lee, L. A. G. Monard, T. Natusch, H. Ngan, H. Park, R. W. Pogge, I. Porritt, I.-G. Shin, T. G. Tan, J. C. Yee, K. A. Alsubai, V. Bozza, D. M. Bramich, P. Browne, M. Dominik, K. Horne, M. Hundertmark, S. Ipatov, N. Kains, C. Liebig, **C. Snodgrass**, I. A. Steele, R. A. Street, and The OGLE Collaboration, Microlensing Discovery of a Tight, Low-Mass-Ratio Planetary-Mass Object around an Old Field Brown Dwarf, *Astrophys. J.*, **778**(1), 38, doi:[10.1088/0004-637X/778/1/38](https://doi.org/10.1088/0004-637X/778/1/38), 2013.
- S. Hanasoge**, **L. Gizon**, and G. Bal, Propagation of seismic waves through a spatio-temporally fluctuating medium: Homogenization, *Astrophys. J.*, **773**(2), 101–108, doi:[10.1088/0004-637X/773/2/101](https://doi.org/10.1088/0004-637X/773/2/101), 2013.
- S. M. Hanasoge**, The influence of noise sources on cross-correlation amplitudes, *Geophys. J. Int.*, **192**(1), 295–309, doi:[10.1093/gji/ggs015](https://doi.org/10.1093/gji/ggs015), 2013.
- S. M. Hanasoge** and M. Branicki, Interpreting cross-correlations of one-bit filtered seismic noise, *Geophys. J. Int.*, **195**, 1811–1830, doi:[10.1093/gji/ggt337](https://doi.org/10.1093/gji/ggt337), 2013.
- K. B. W. Harpsøe, S. Hardis, T. C. Hinse, G. Jorgensen, L. Mancini, J. Southworth, K. A. Alsubai, V. Bozza, P. Browne, M. J. Burgdorf, S. C. Novati, P. Dodds, M. Dominik, X.-S. Fang, F. Finet, T. Gerner, S.-H. Gu, M. Hundertmark, J. Jessen-Hansen, N. Kains, E. Kerins, H. Kjeldsen, C. Liebig, M. N. Lund, M. Lundkvist, M. Mathiasen, D. Nesvorny, N. Nikolov, M. T. Penny, S. Proft, S. Rahvar, D. Ricci, K. C. Sahu, G. Scarpetta, S. Schaefer, F. Schönebeck, **C. Snodgrass**, J. Skottfelt, J. Surdej, J. Tregloan-Reed, and O. Wertz, The transiting system GJ1214: high-precision defocused transit observations and a search for evidence of transit timing variation, *Astron. & Astrophys.*, **549**, A10, doi:[10.1051/0004-6361/201219996](https://doi.org/10.1051/0004-6361/201219996), 2013.
- M. Hilchenbach**, B. Gniewosz, N. Tarcea, K. Lehto, and H. J. Lehto, Iron Meteorite Fragment Characterized with Raman Spectroscopy as Extraterrestrial Analog Matter for Rosetta Cosima, *Meteorit. Planet. Sci.*, **48**, A163–A163, 2013.
- R. Holzreuter** and **S. K. Solanki**, Three-dimensional non-LTE radiative transfer effects in Fe I lines II. Line formation in 3D radiation hydrodynamic simulations, *Astron. & Astrophys.*, **558**, doi:[10.1051/0004-6361/201322135](https://doi.org/10.1051/0004-6361/201322135), 2013.
- K. Hori and **J. Wicht**, Subcritical dynamos in the early Mars' core: Implications for cessation of the past Martian dynamo, *Phys. Earth Planet. Inter.*, **219**, 21–33, doi:[10.1016/j.pepi.2013.03.005](https://doi.org/10.1016/j.pepi.2013.03.005), 2013.
- D. Huber, J. A. Carter, M. Barbieri, A. Miglio, K. M. Deck, D. C. Fabrycky, B. T. Montet, L. A. Buchhave, W. J. Chaplin, **S. Hekker**, J. Montalbán, R. Sanchis-Ojeda, S. Basu, T. R. Bedding, T. L. Campante, J. Christensen-Dalsgaard, Y. P. Elsworth, D. Stello, T. Arentoft, E. B. Ford, R. L. Gilliland, R. Handberg, A. W. Howard, H. Isaacson, J. A. Johnson, C. Karoff, S. D. Kawaler, H. Kjeldsen, D. W. Latham, M. N. Lund, M. Lundkvist, G. W. Marcy, T. S. Metcalfe, V. Silva Aguirre, and J. N. Winn, Stellar Spin-Orbit Misalignment in a Multiplanet System, *Science*, **342**, 137, doi:[10.1126/science.1242066](https://doi.org/10.1126/science.1242066), 2013.
- K.-H. Hwang, J.-Y. Choi, I. A. Bond, T. Sumi, C. Han, B. S. Gaudi, A. Gould, V. Bozza, J.-P. Beaulieu, Y. Tsapras, F. Abe, D. P. Bennett, C. S. Botzler, P. Chote, M. Freeman, A. Fukui, D. Fukunaga, P. Harris, Y. Itow, N. Koshimoto, C. H. Ling, K. Masuda, Y. Matsubara, Y. Muraki, S. Namba, K. Ohnishi, N. J. Rattenbury, T. Saito, D. J. Sullivan, W. L. Sweatman, D. Suzuki, P. J. Tristram, K. Wada, N. Yamai, P. C. M. Yock, A. Yonehara, L. Andrade de Almeida, D. L. DePoy, S. Dong, F. Jablonski, Y. K. Jung, A. Kavka, C.-U. Lee, H. Park, R. W. Pogge, I.-G. Shin, J. C. Yee, M. D. Albrow, E. Bachelet, V. Batista, S. Brilliant, J. A. R. Caldwell, A. Cassan, A. Cole, E. Cirrakes, C. Coutures, S. Dieters, D. D. Prester, J. Donatowicz, P. Fouque, J. Greenhill, U. G. Jorgensen, S. R. Kane, D. Kubas, J.-B. Marquette, R. Martin, P. Meintjes, J. Menzies, K. R. Pollard, A. Williams, D. Wouters, D. M. Bramich, M. Dominik, K. Horne, P. Browne, M. Hundertmark, S. Ipatov, N. Kains, **C. Snodgrass**, I. A. Steele, R. A. Street, and The MOA Collaboration, Interpretation of a Short-Term Anomaly in the Gravitational Microlensing Event MOA-2012-BLG-486, *Astrophys. J.*, **778**(1), 55, doi:[10.1088/0004-637X/778/1/55](https://doi.org/10.1088/0004-637X/778/1/55), 2013.

- D. E. Innes and L. Teriaca, Quiet Sun Explosive Events: Jets, Splashes, and Eruptions, *Solar Phys.*, **282**, 453–469, doi:[10.1007/s11207-012-0199-y](https://doi.org/10.1007/s11207-012-0199-y), 2013.
- S. Jafarzadeh, S. K. Solanki, A. Feller, A. Lagg, A. Pietarila, S. Danilovic, T. L. Riethmüller, and V. M. Pilet, Structure and dynamics of isolated internetwork Ca II H bright points observed by SUNRISE, *Astron. & Astrophys.*, **549**, A116, doi:[10.1051/0004-6361/201220089](https://doi.org/10.1051/0004-6361/201220089), 2013.
- N. Jain, J. Büchner, S. Dorfman, H. Ji, and A. S. Sharma, Current disruption and its spreading in collisionless magnetic reconnection, *Phys. Plasmas*, **20**, 112101, doi:[10.1063/1.4827828](https://doi.org/10.1063/1.4827828), 2013.
- D. Jewitt, J. Agarwal, H. Weaver, M. Mutchler, and S. Larson, The Extraordinary Multi-tailed Main-belt Comet P/2013 P5, *Astrophys. J.*, **778**(1), L21, doi:[10.1088/2041-8205/778/1/L21](https://doi.org/10.1088/2041-8205/778/1/L21), 2013.
- D. Jewitt, M. Ishiguro, and J. Agarwal, Large Particles in Active Asteroid P/2010 A2, *Astrophys. J.*, **764**(1), L5, doi:[10.1088/2041-8205/764/1/L5](https://doi.org/10.1088/2041-8205/764/1/L5), 2013.
- D. Jewitt, J. Li, and J. Agarwal, The Dust Tail of Asteroid (3200) Phaethon, *Astrophys. J.*, **771**(2), L36, doi:[10.1088/2041-8205/771/2/L36](https://doi.org/10.1088/2041-8205/771/2/L36), 2013.
- J. Jiang, R. H. Cameron, D. Schmitt, and E. Işık, Modeling solar cycles 15 to 21 using a flux transport dynamo, *Astron. & Astrophys.*, **553**, A128, doi:[10.1051/0004-6361/201321145](https://doi.org/10.1051/0004-6361/201321145), 2013.
- J. Jiang, R. H. Cameron, D. Schmitt, and M. Schüssler, Can Surface Flux Transport Account for the Weak Polar Field in Cycle 23?, *Space Sci. Rev.*, **176**, 289–298, doi:[10.1007/s11214-011-9783-y](https://doi.org/10.1007/s11214-011-9783-y), 2013.
- N. Kains, D. M. Bramich, A. Arellano Ferro, R. F. Jaimes, U. G. Jorgensen, S. Giridhar, M. T. Penny, K. A. Alsubai, J. M. Andersen, V. Bozza, P. Browne, M. Burgdorf, S. C. Novati, Y. Damerdjji, C. Diehl, P. Dodds, M. Dominik, A. Elyiv, X.-S. Fang, E. Giannini, S.-H. Gu, S. Hardis, K. Harpsoe, T. C. Hinse, A. Hornstrup, M. Hundertmark, J. Jessen-Hansen, D. Juncher, E. Kerins, H. Kjeldsen, H. Korhonen, C. Liebig, M. N. Lund, M. Lundkvist, L. Mancini, R. Martin, M. Mathiasen, M. Rabus, S. Rahvar, D. Ricci, K. Sahu, G. Scarpetta, J. Skottfelt, C. Snodgrass, J. Southworth, J. Surdej, J. Tregloan-Reed, C. Vilela, O. Wertz, A. Williams, and The MiNDSTEp Consortium, Estimating the parameters of globular cluster M 30 (NGC 7099) from time-series photometry, *Astron. & Astrophys.*, **555**, A36, doi:[10.1051/0004-6361/201321819](https://doi.org/10.1051/0004-6361/201321819), 2013.
- N. Kains, R. A. Street, J.-Y. Choi, C. Han, A. Udalski, L. A. Almeida, F. Jablonski, P. J. Tristram, U. G. Jorgensen, M. K. Szymanski, M. Kubiak, G. Pietrzynski, I. Soszynski, R. Poleski, S. Kozłowski, P. Pietrukowicz, K. Ulaczyk, L. Wyrzykowski, J. Skowron, K. A. Alsubai, V. Bozza, P. Browne, M. J. Burgdorf, S. C. Novati, P. Dodds, M. Dominik, S. Dreizler, X.-S. Fang, F. Grundahl, C.-H. Gu, S. Hardis, K. Harpsoe, F. V. Hessman, T. C. Hinse, A. Hornstrup, M. Hundertmark, J. Jessen-Hansen, E. Kerins, C. Liebig, M. Lund, M. Lundkvist, L. Mancini, M. Mathiasen, M. T. Penny, S. Rahvar, D. Ricci, K. C. Sahu, G. Scarpetta, J. Skottfelt, C. Snodgrass, J. Southworth, J. Surdej, J. Tregloan-Reed, J. Wambsganss, O. Wertz, D. Bajek, D. M. Bramich, K. Horne, S. Ipatov, I. A. Steele, Y. Tsapras, F. Abe, D. P. Bennett, I. A. Bond, C. S. Botzler, P. Chote, M. Freeman, A. Fukui, K. Furusawa, Y. Itow, C. H. Ling, K. Masuda, Y. Matsubara, N. Miyake, Y. Muraki, K. Ohnishi, N. Rattenbury, T. Saito, D. J. Sullivan, T. Sumi, D. Suzuki, K. Suzuki, W. L. Sweatman, S. Takino, K. Wada, P. C. M. Yock, W. Allen, V. Batista, S.-J. Chung, G. Christie, D. L. DePoy, J. Drummond, B. S. Gaudi, A. Gould, C. Henderson, Y.-K. Jung, J.-R. Koo, C.-U. Lee, J. McCormick, D. McGregor, J. A. Munoz, T. Natusch, H. Ngan, H. Park, R. W. Pogge, I.-G. Shin, J. Yee, M. D. Albrow, E. Bachelet, J.-P. Beaulieu, S. Brilliant, J. A. R. Caldwell, A. Cassan, A. Cole, E. Corrales, Ch. Coutures, S. Dieters, D. D. Prester, J. Donatowicz, P. Fouque, J. Greenhill, S. R. Kane, D. Kubas, J.-B. Marquette, R. Martin, P. Meintjes, J. Menzies, K. R. Pollard, A. Williams, D. Wouters, A. Zub, and The OGLE Collaboration, A giant planet beyond the snow line in microlensing event OGLE-2011-BLG-0251, *Astron. & Astrophys.*, **552**, A70, doi:[10.1051/0004-6361/201220626](https://doi.org/10.1051/0004-6361/201220626), 2013.
- R. Kallenbach, E. Murphy, M. Gramkow, Bodoand Rech, K. Weidlich, T. Leikert, R. Henkelmann, B. Trefzger, B. Metz, H. Michaelis, K. Lingenauber, S. Deltogno, T. Behnke, N. Thomas, D. Piazza, and

- K. Seiferlin, Space-qualified laser system for the BepiColombo Laser Altimeter, *Appl. Opt.*, **52**(36), 8732–8746, doi:[10.1364/AO.52.008732](https://doi.org/10.1364/AO.52.008732), 2013.
- S. Kasahara, **E. A. Kronberg**, T. Kimura, C. Tao, S. V. Badman, A. Masters, A. Retinò, **N. Krupp**, and M. Fujimoto, Asymmetric distribution of reconnection jet fronts in the Jovian nightside magnetosphere, *J. Geophys. Res.*, **118**, 375–384, doi:[10.1029/2012JA018130](https://doi.org/10.1029/2012JA018130), 2013.
- M. S. Kelley, Y. R. Fernandez, J. Licandro, C. M. Lisse, W. T. Reach, M. F. A'Hearn, J. Bauer, H. Campins, A. Fitzsimmons, O. Groussin, P. L. Lamy, S. C. Lowry, K. J. Meech, J. Pittichova, **C. Snodgrass**, I. Toth, and H. A. Weaver, The persistent activity of Jupiter-family comets at 3–7 AU, *Icarus*, **225**(1), 475–494, doi:[10.1016/j.icarus.2013.04.012](https://doi.org/10.1016/j.icarus.2013.04.012), 2013.
- M. S. Kelley, D. J. Lindler, D. Bodewits, M. F. A'Hearn, C. M. Lisse, L. Kolokolova, **J. Kissel**, and B. Hermalyn, A distribution of large particles in the coma of Comet 103P/Hartley 2, *Icarus*, **222**(2), 634–652, doi:[10.1016/j.icarus.2012.09.037](https://doi.org/10.1016/j.icarus.2012.09.037), 2013.
- I. V. Khatuntsev, M. V. Patsaeva, **D. V. Titov**, N. I. Ignatieva, A. V. Turina, S. S. Limaye, **W. J. Markiewicz**, M. Almeida, Th. Roatsch, and **R. Moissl**, Cloud level winds from the Venus Express Monitoring Camera imaging, *Icarus*, **226**, 140–158, doi:[10.1016/j.icarus.2013.05.018](https://doi.org/10.1016/j.icarus.2013.05.018), 2013.
- C. Kiss, T. G. Müller, E. Vilenius, A. Pál, P. Santos-Sanz, E. Lellouch, G. Marton, E. Verebélyi, N. Szalai, **P. Hartogh**, J. Stansberry, F. Henry, and A. Delsanti, Optimized Herschel/PACS photometer observing and data reduction strategies for moving solar system targets, *Experimental Astronomy*, pp. 1–14, doi:[10.1007/s10686-013-9350-5](https://doi.org/10.1007/s10686-013-9350-5), 2013.
- P. Kollmann**, **E. Roussos**, C. Paranicas, **N. Krupp**, and D. K. Haggerty, Processes forming and sustaining Saturn's proton radiation belts, *Icarus*, **222**, 323–341, doi:[10.1016/j.icarus.2012.10.033](https://doi.org/10.1016/j.icarus.2012.10.033), 2013.
- K. J. Kossacki and **W. J. Markiewicz**, Comet 67P/CG: Influence of the sublimation coefficient on the temperature and outgassing, *Icarus*, **224**, 172–177, doi:[10.1016/j.icarus.2013.02.012](https://doi.org/10.1016/j.icarus.2013.02.012), 2013.
- M. Kramar, **B. Inhester**, H. Lin, and J. Davila, Vector Tomography for the Coronal Magnetic Field. II. Hanle Effect Measurements, *Astrophys. J.*, **775**(1), 25, doi:[10.1088/0004-637X/775/1/25](https://doi.org/10.1088/0004-637X/775/1/25), 2013.
- N. A. Krivova** and **S. K. Solanki**, Models of Solar Total and Spectral Irradiance Variability of Relevance for Climate Studies, in: *Climate and Weather of the Sun-Earth System (CAWSES)* (edited by F.-J. Lübken), chap. 2, pp. 19–38, Springer Atmospheric Sciences, Springer, Dordrecht, 2013, ISBN 978-94-007-4347-2, doi:[10.1007/978-94-007-4348-9_2](https://doi.org/10.1007/978-94-007-4348-9_2).
- E. A. Kronberg** and **P. W. Daly**, Spectral analysis for wide energy channels, *Geoscientific Instrumentation Methods and Data Systems*, **2**, 257–261, doi:[10.5194/gi-2-257-2013](https://doi.org/10.5194/gi-2-257-2013), 2013.
- N. Krupp**, **E. Roussos**, H. Kriegel, P. Kollmann, M. G. Kivelson, **A. Kotova**, C. Paranicas, D. G. Mitchell, S. M. Krimigis, and K. K. Khurana, Energetic particle measurements in the vicinity of Dione during the three Cassini encounters 2005–2011, *Icarus*, **226**, 617–628, doi:[10.1016/j.icarus.2013.06.007](https://doi.org/10.1016/j.icarus.2013.06.007), 2013.
- P. Kumar** and **D. E. Innes**, Multiwavelength Observations of an Eruptive Flare: Evidence for Blast Waves and Break-Out, *Solar Phys.*, **288**(1), 255–268, doi:[10.1007/s11207-013-0303-y](https://doi.org/10.1007/s11207-013-0303-y), 2013.
- P. Kumar**, **D. E. Innes**, and **B. Inhester**, Solar Dynamics Observatory/Atmospheric Imaging Assembly Observations of a Reflecting Longitudinal Wave in a Coronal Loop, *Astrophys. J.*, **779**(1), L7, doi:[10.1088/2041-8205/779/1/L7](https://doi.org/10.1088/2041-8205/779/1/L7), 2013.
- T. Kuroda, **A. S. Medvedev**, Y. Kasaba, and **P. Hartogh**, Carbon dioxide ice clouds, snowfalls, and baroclinic waves in the northern winter polar atmosphere of Mars, *Geophys. Res. Lett.*, **40**, 1484–1488, doi:[10.1002/grl.50326](https://doi.org/10.1002/grl.50326), 2013.
- L. Le Corre**, **V. Reddy**, N. Schmedemann, K. J. Becker, D. P. O'Brien, N. Yamashita, P. N. Peplowski, T. H. Prettyman, J.-Y. Li, E. A. Cloutis, B. W. Denevi, T. Kneisl, E. Palmer, R. W. Gaskell, **A. Nathues**, M. J. Gaffey, D. W. Mittlefehldt, W. B. Garry, **H. Sierks**, C. T. Russell, C. A. Raymond, M. C. De Sanctis, and

- E. Ammanito, Olivine or impact melt: Nature of the "Orange" material on Vesta from Dawn, *Icarus*, **226**(2), 1568–1594, doi:[10.1016/j.icarus.2013.08.013](https://doi.org/10.1016/j.icarus.2013.08.013), 2013.
- K. S. Lee, **D. E. Innes**, Y. J. Moon, K. Shibata, J. Y. Lee, and Y. D. Park, Fast extreme-ultraviolet dimming associated with a coronal jet seen in multi-wavelength and stereoscopic observations, *Astrophys. J.*, **766**, 1–12, doi:[10.1088/0004-637X/766/1/1](https://doi.org/10.1088/0004-637X/766/1/1), 2013.
- K. D. Leka, G. Barnes, **A. C. Birch**, I. Gonzalez-Hernandez, T. Dunn, B. Javornik, and D. C. Braun, Helioseismology of Pre-emerging Active Regions. I. Overview, Data, and Target Selection Criteria, *Astrophys. J.*, **762**(2), 130, doi:[10.1088/0004-637X/762/2/130](https://doi.org/10.1088/0004-637X/762/2/130), 2013.
- J.-Y. Li, L. Le Corre, S. E. Schroeder, **V. Reddy**, B. W. Denevi, B. J. Buratti, S. Mottola, **M. Hoffmann**, **P. Gutierrez-Marques**, **A. Nathues**, C. T. Russell, and C. A. Raymond, Global photometric properties of Asteroid (4) Vesta observed with Dawn Framing Camera, *Icarus*, **226**(2), 1252–1274, doi:[10.1016/j.icarus.2013.08.011](https://doi.org/10.1016/j.icarus.2013.08.011), 2013.
- K. Li**, **S. Haaland**, A. Eriksson, M. André, E. Engwall, **Y. Wei**, **E. A. Kronberg**, **M. Fränz**, **P. W. Daly**, H. Zhao, and Q. Y. Ren, Transport of cold ions from the polar ionosphere to the plasma sheet, *J. Geophys. Res.*, **118**, 5467–5477, doi:[10.1002/jgra.50518](https://doi.org/10.1002/jgra.50518), 2013.
- Z.-C. Liang**, **L. Gizon**, **H. Schunker**, and **T. Philippe**, Helioseismology of sunspots: defocusing, folding, and healing of wavefronts, *Astron. & Astrophys.*, **558**, A129, doi:[10.1051/0004-6361/201321483](https://doi.org/10.1051/0004-6361/201321483), 2013.
- M. Lippi, G. L. Villanueva, M. A. DiSanti, **H. Bönhardt**, M. J. Mumma, B. P. Bonev, and D. Pralnik, A new model for the v1 vibrational band of HCN in cometary comae, with application to three comets, *Astron. & Astrophys.*, **551**, A51, doi:[10.1051/0004-6361/201219903](https://doi.org/10.1051/0004-6361/201219903), 2013.
- D. C. Lis, N. Biver, D. Bockelée-Morvan, **P. Hartogh**, E. A. Bergin, G. A. Blake, J. Crovisier, **M. de Val-Borro**, E. Jehin, M. Küppers, J. Manfroid, R. Moreno, **M. Rengel**, and S. Szutowicz, A Herschel Study of D/H in Water in the Jupiter-family comet 45P/Honda-Mrkos-Pajdušáková and Prospects for D/H Measurements with CCAT, *Astrophys. J.*, **774**, L3, doi:[10.1088/2041-8205/774/1/L3](https://doi.org/10.1088/2041-8205/774/1/L3), 2013.
- C. Liu, N. Deng, J. Lee, **T. Wiegmann**, R. L. Moore, and H. Wang, Evidence for Solar Tether-Cutting Magnetic Reconnection from Coronal Field Extrapolations, *Astrophys. J.*, **778**(2), L36, doi:[10.1088/2041-8205/778/2/L36](https://doi.org/10.1088/2041-8205/778/2/L36), 2013.
- R. Lundin, S. Barabash, M. Holmstrom, H. Nilsson, Y. Futaana, R. Ramstad, M. Yamauchi, **E. Dubinin**, and **M. Fraenz**, Solar cycle effects on the ion escape from Mars, *Geophys. Res. Lett.*, **40**(23), 6028–6032, doi:[10.1002/2013GL058154](https://doi.org/10.1002/2013GL058154), 2013.
- L. Mancini, S. Ciceri, G. Chen, J. Tregloan-Reed, J. J. Fortney, J. Southworth, T. G. Tan, M. Burgdorf, S. C. Novati, M. Dominik, X.-S. Fang, F. Finet, T. Gerner, S. Hardis, T. C. Hinse, U. G. Jorgensen, C. Liebig, N. Nikolov, D. Ricci, S. Schaefer, F. Schoenebeck, J. Skottfelt, O. Wertz, K. A. Alsubai, V. Bozza, P. Browne, P. Dodds, S.-H. Gu, K. Harpsoe, T. Henning, M. Hundertmark, J. Jessen-Hansen, N. Kains, E. Kerins, H. Kjeldsen, M. N. Lund, M. Lundkvist, N. Madhusudhan, M. Mathiasen, M. T. Penny, S. Prof, S. Rahvar, K. Sahu, G. Scarpetta, **C. Snodgrass**, and J. Surdej, Physical properties, transmission and emission spectra of the WASP-19 planetary system from multi-colour photometry, *Mon. Not. Roy. Astron. Soc.*, **436**(1), 2–18, doi:[10.1093/mnras/stt1394](https://doi.org/10.1093/mnras/stt1394), 2013.
- H. Y. McSween, E. Ammannito, **V. Reddy**, T. H. Prettyman, A. W. Beck, M. C. De Sanctis, **A. Nathues**, **L. Le Corre**, D. P. O'Brien, N. Yamashita, T. J. McCoy, D. W. Mittlefehldt, M. J. Toplis, P. Schenk, E. Palomba, D. Turrini, F. Tosi, F. Zambon, A. Longobardo, F. Capaccioni, C. A. Raymond, and C. T. Russell, Composition of the Rheasilvia basin, a window into Vesta's interior, *J. Geophys. Res.*, **118**(2), 335–346, doi:[10.1002/jgre.20057](https://doi.org/10.1002/jgre.20057), 2013.
- H. Y. McSween, Jr., R. P. Binzel, M. C. De Sanctis, E. Ammannito, T. H. Prettyman, A. W. Beck, **V. Reddy**, **L. Le Corre**, M. J. Gaffey, T. B. McCord, C. A. Raymond, C. T. Russell, and The Dawn Sci Team, Dawn; the Vesta-HED connection; and the geologic context for eucrites, diogenites, and howardites, *Meteorit. Planet. Sci.*, **48**(11), 2090–2104, doi:[10.1111/maps.12108](https://doi.org/10.1111/maps.12108), 2013.

- A. S. Medvedev, J. Sethunadh, and P. Hartogh, From cold to warm gas giants: A three-dimensional atmospheric general circulation modeling, *Icarus*, **225**, 228–235, doi:[10.1016/j.icarus.2013.03.028](https://doi.org/10.1016/j.icarus.2013.03.028), 2013.
- A. S. Medvedev, E. Yigit, T. Kuroda, and P. Hartogh, General circulation modeling of the Martian upper atmosphere during global dust storms, *J. Geophys. Res.*, **118**, 2234–2246, doi:[10.1002/jgre.20163](https://doi.org/10.1002/jgre.20163), 2013.
- K. J. Meech, B. Yang, J. Kleyana, M. Ansdell, H.-F. Chiang, O. Hainaut, J.-B. Vincent, H. Boehnhardt, A. Fitzsimmons, T. Rector, T. Riesen, J. V. Keane, B. Reipurth, H. H. Hsieh, P. Michaud, G. Milani, E. Bryssinck, R. Ligustri, R. Trabatti, G.-P. Tozzi, S. Mottola, E. Kuehrt, B. Bhatt, D. Sahu, C. Lisse, L. Denneau, R. Jedicke, E. Magnier, and R. Wainscoat, Outgassing Behavior of C/2012 S1 (ISON) from 2011 September to 2013 June, *Astrophys. J.*, **776**(2), L20, doi:[10.1088/2041-8205/776/2/L20](https://doi.org/10.1088/2041-8205/776/2/L20), 2013.
- U. J. Meierhenrich, J. R. L. Cason, C. Szopa, R. Sternberg, F. Raulin, W. H.-P. Thiemann, and F. Goesmann, Evaluating the robustness of the enantioselective stationary phases on the Rosetta mission against space vacuum vaporization, *Adv. Space Res.*, **52**(12), 2080–2084, doi:[10.1016/j.asr.2013.09.018](https://doi.org/10.1016/j.asr.2013.09.018), 2013.
- P.-Y. Meslin, O. Gasnault, O. Forni, S. Schroeder, A. Cousin, G. Berger, S. M. Clegg, J. Lasue, S. Maurice, V. Sautter, S. Le Mouelic, R. C. Wiens, C. Fabre, W. Goetz, D. Bish, N. Mangold, B. Ehlmann, N. Lanza, A.-M. Harri, R. Anderson, E. Rampe, T. H. McConnochie, P. Pinet, D. Blaney, R. Leveille, D. Archer, B. Barraclough, S. Bender, D. Blake, J. G. Blank, N. Bridges, B. C. Clark, L. DeFlores, D. Delapp, G. Dromart, M. D. Dyar, M. Fisk, B. Gondet, J. Grotzinger, K. Herkenhoff, J. Johnson, J.-L. Lacour, Y. Langevin, L. Leshin, E. Lewin, M. B. Madsen, N. Melikechi, A. Mezzacappa, M. A. Mischna, J. E. Moores, H. Newsom, A. Ollila, R. Perez, N. Renno, J.-B. Sirven, R. Tokar, M. de la Torre, L. d'Uston, D. Vaniman, A. Yingst, and The MSL Sci Team, Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars, *Science*, **341**(6153), 1238670, doi:[10.1126/science.1238670](https://doi.org/10.1126/science.1238670), 2013.
- M. Mierla, D. B. Seaton, D. Berghmans, I. Chifu, A. De Groof, B. Inhester, L. Rodriguez, G. Stenborg, and A. N. Zhukov, Study of a Prominence Eruption using PROBA2/SWAP and STEREO/EUVI Data, *Solar Phys.*, **286**, 241–253, doi:[10.1007/s11207-012-9965-0](https://doi.org/10.1007/s11207-012-9965-0), 2013.
- M. E. Minitti, L. C. Kah, R. A. Yingst, K. S. Edgett, R. C. Anderson, L. W. Beegle, J. L. Carsten, R. G. Deen, W. Goetz, C. Hardgrove, D. E. Harker, K. E. Herkenhoff, J. A. Hurowitz, L. Jandura, M. R. Kennedy, G. Kocurek, G. M. Krezoski, S. R. Kuhn, D. Limonadi, L. Lipkaman, M. B. Madsen, T. S. Olson, M. L. Robinson, S. K. Rowland, D. M. Rubin, C. Seybold, J. Schieber, M. Schmidt, D. Y. Sumner, V. V. Tompkins, J. K. Van Beek, and T. Van Beek, MAHLI at the Rocknest sand shadow: Science and science-enabling activities, *J. Geophys. Res.*, **118**(11), 2338–2360, doi:[10.1002/2013JE004426](https://doi.org/10.1002/2013JE004426), 2013.
- D. D. Morgan, D. A. Gurnett, D. L. Kirchner, J. L. Fox, E. Nielsen, and J. J. Plaut, Correction to "Variation of the Martian ionospheric electron density from Mars Express radar soundings" (vol 118, pg 4710, 2013), *J. Geophys. Res.*, **118**(7), 4710–4710, doi:[10.1002/jgra.50369](https://doi.org/10.1002/jgra.50369), 2013.
- D. D. Morgan, O. Witasse, E. Nielsen, D. A. Gurnett, F. Duru, and D. L. Kirchner, The processing of electron density profiles from the Mars Express MARSIS topside sounder, *Radio Sci.*, **48**(3), 197–207, doi:[10.1002/rds.20023](https://doi.org/10.1002/rds.20023), 2013.
- N. Mori, D. Schmitt, J. Wicht, A. Ferriz-Mas, H. Mouri, A. Nakamichi, and M. Morikawa, Domino model for geomagnetic reversals, *Phys. Rev. E*, **87**, 012108, doi:[10.1103/PhysRevE.87.012108](https://doi.org/10.1103/PhysRevE.87.012108), 2013.
- B. Mosser, W. A. Dziembowski, K. Belkacem, M. J. Goupil, E. Michel, R. Samadi, I. Soszyński, M. Vrad, Y. Elsworth, S. Hekker, and S. Mathur, Period-luminosity relations in evolved red giants explained by solar-like oscillations, *Astron. & Astrophys.*, **559**, 137, doi:[10.1051/0004-6361/201322243](https://doi.org/10.1051/0004-6361/201322243), 2013.
- A. G. Muñoz, R. Hueso, A. Sánchez-Lavega, W. J. Markiewicz, D. V. Titov, O. Witasse, and A. Opitz, Limb imaging of the Venus O₂ visible nightglow with the Venus Monitoring Camera, *Geophys. Res. Lett.*, **40**, 2539–2543, doi:[10.1002/grl.50553](https://doi.org/10.1002/grl.50553), 2013.

- A. Muñoz-Jaramillo, **M. Dasi-Espuig**, L. A. Balmaceda, and E. E. DeLuca, Solar Cycle Propagation, Memory, and Prediction: Insights from a Century of Magnetic Proxies, *Astrophys. J.*, **767**(2), L25, doi:[10.1088/2041-8205/767/2/L25](https://doi.org/10.1088/2041-8205/767/2/L25), 2013.
- C. Munteanu, **S. Haaland**, B. Mailyan, M. Echim, and K. Mursula, Propagation delay of solar wind discontinuities: Comparing different methods and evaluating the effect of wavelet denoising, *J. Geophys. Res.*, **118**, 3985–3994, doi:[10.1002/jgra.50429](https://doi.org/10.1002/jgra.50429), 2013.
- C. Nabert, **K.-H. Glassmeier**, and F. Plaschke, A new method for solving the MHD equations in the magnetosheath, *Ann. Geophys.*, **31**(3), 419–437, doi:[10.5194/angeo-31-419-2013](https://doi.org/10.5194/angeo-31-419-2013), 2013.
- K. Nagashima**, **L. Gizon**, **A. Birch**, B. Löptien, S. Couvidat, and B. Fleck, Helioseismic and Magnetic Imager multi-height Dopplergrams, in: *Progress in Physics of the Sun and Stars: A New Era in Helio- and Asteroseismology* (edited by H. Shibahashi and A. E. Lynas-Gray), vol. 479 of *ASP Conference Series*, pp. 429–432, 2013.
- R. Nakamura, W. Baumjohann, E. Panov, M. Volwerk, J. Birn, A. Artemyev, A. A. Petrukovich, O. Amm, L. Juusola, M. V. Kubyshkina, S. Apatenkov, **E. A. Kronberg**, **P. W. Daly**, M. Fillingim, J. M. Weygand, A. Fazakerley, and Y. Khotyaintsev, Flow bouncing and electron injection observed by Cluster, *J. Geophys. Res.*, **118**, 2055–2072, doi:[10.1002/jgra.50134](https://doi.org/10.1002/jgra.50134), 2013.
- Y. Narita, **K.-H. Glassmeier**, U. Motschmann, and M. Wilczek, Doppler shift and broadening in solar wind turbulence, *Earth, Planets and Space*, **65**(1), E5–E8, doi:[10.5047/eps.2012.12.002](https://doi.org/10.5047/eps.2012.12.002), 2013.
- D. A. Newnham, P. J. Espy, M. A. Clilverd, C. J. Rodger, S. A., D. J. Maxfield, **P. Hartogh**, C. Straub, K. Holmén, and B. Horne, Observations of nitric oxide in the Antarctic middle atmosphere during recurrent geomagnetic storms, *J. Geophys. Res.*, **118**, 7874 – 7885, doi:[10.1002/2013JA019056](https://doi.org/10.1002/2013JA019056), 2013.
- D. H. Nickeler, M. Karlicky, **T. Wiegmann**, and M. Kraus, Fragmentation of electric currents in the solar corona by plasma flows, *Astron. & Astrophys.*, **556**, A61, doi:[10.1051/0004-6361/201321847](https://doi.org/10.1051/0004-6361/201321847), 2013.
- M. B. Nielsen**, **L. Gizon**, **H. Schunker**, and C. Karoff, Rotation periods of 12 000 main-sequence Kepler stars: Dependence on stellar spectral type and comparison with $v \sin i$ observations, *Astron. & Astrophys.*, **557**, L10, doi:[10.1051/0004-6361/201321912](https://doi.org/10.1051/0004-6361/201321912), 2013.
- M. Ohtake, C. M. Pieters, P. Isaacson, S. Besse, Y. Yokota, T. Matsunaga, J. Boardman, S. Yamamoto, J. Haruyama, M. Staid, **U. Mall**, and R. O. Green, One Moon, Many Measurements 3: Spectral reflectance, *Icarus*, **226**(1), 364–374, doi:[10.1016/j.icarus.2013.05.010](https://doi.org/10.1016/j.icarus.2013.05.010), 2013.
- H. J. Opgenoorth, D. J. Andrews, **M. Fränz**, M. Lester, N. J. T. Edberg, D. Morgan, F. Duru, O. Witasse, and A. O. Williams, Mars ionospheric response to solar wind variability, *J. Geophys. Res.*, **118**(10), 6558–6587, doi:[10.1002/jgra.50537](https://doi.org/10.1002/jgra.50537), 2013.
- L. O'Rourke, D. Bockelee-Morvan, N. Biver, B. Altieri, D. Teyssier, L. Jorda, V. Debout, **C. Snodgrass**, M. Kueppers, M. A'Hearn, T. G. Mueller, and T. Farnham, Herschel and IRAM-30 m observations of comet C/2012 S1 (ISON) at 4.5 AU from the Sun, *Astron. & Astrophys.*, **560**, A101, doi:[10.1051/0004-6361/201322756](https://doi.org/10.1051/0004-6361/201322756), 2013.
- L. O. O'Rourke, **C. Snodgrass**, **M. de Val-Borro**, N. Biver, D. Bockelée-Morvan, H. Hsieh, D. Teyssier, Y. Fernandez, M. Küppers, M. Micheli, and **P. Hartogh**, Determination of an upper limit for the water outgassing rate of main-belt comet P/2012 T1 (Panstarrs), *Astrophys. J.*, **774**, L13, doi:[10.1088/2041-8205/774/1/L13](https://doi.org/10.1088/2041-8205/774/1/L13), 2013.
- L. Paganini, M. J. Mumma, **H. Boehnhardt**, M. A. DiSanti, G. L. Villanueva, B. P. Bonev, M. Lippi, H. U. Käufel, and G. A. Blake, Ground-Based Infrared Detections of CO in the Centaur-comet 29P/Schwassmann-Wachmann 1 at 6.26 AU from the Sun, *Astrophys. J.*, **766**, 100, doi:[10.1088/0004-637X/766/2/100](https://doi.org/10.1088/0004-637X/766/2/100), 2013.
- N. K. Panesar**, **D. E. Innes**, **S. K. Tiwari**, and B. C. Low, A solar tornado triggered by flares?, *Astron. & Astrophys.*, **549**, A105, doi:[10.1051/0004-6361/201220503](https://doi.org/10.1051/0004-6361/201220503), 2013.

- E. V. Panov, W. Baumjohann, R. Nakamura, O. Amm, M. V. Kubyshkina, **K.-H. Glassmeier**, J. M. Weygand, V. Angelopoulos, A. A. Petrukovich, and V. A. Sergeev, Ionospheric response to oscillatory flow braking in the magnetotail, *J. Geophys. Res.*, **118**(4), 1529–1544, doi:[10.1002/jgra.50190](https://doi.org/10.1002/jgra.50190), 2013.
- H. Park, A. Udalski, C. Han, A. Gould, J.-P. Beaulieu, Y. Tsapras, M. K. Szymanski, M. Kubiak, I. Soszynski, G. Pietrzynski, R. Poleski, K. Ulaczyk, P. Pietrukowicz, S. Kozłowski, J. Skowron, L. Wyrzykowski, J.-Y. Choi, D. L. Depoy, S. Dong, B. S. Gaudi, K.-H. Hwang, Y. K. Jung, A. Kavka, C.-U. Lee, L. A. G. Monard, B.-G. Park, R. W. Pogge, I. Porritt, I.-G. Shin, J. C. Yee, M. D. Albrow, D. P. Bennett, J. A. R. Caldwell, A. Cassan, C. Coutures, D. Dominis, J. Donatowicz, P. Fouque, J. Greenhill, M. Huber, U. G. Jorgensen, S. Kane, D. Kubas, J.-B. Marquette, J. Menzies, C. Pitrou, K. R. Pollard, K. C. Sahu, J. Wambsganss, A. Williams, M. Zuss, A. Allan, D. M. Bramich, P. Browne, M. Dominik, K. Horne, M. Hundertmark, N. Kains, **C. Snodgrass**, I. A. Steele, R. A. Street, and The OGLE Collaboration, Gravitational Binary-Lens Events with Prominent Effects of Lens Orbital Motion, *Astrophys. J.*, **778**(2), 134, doi:[10.1088/0004-637X/778/2/134](https://doi.org/10.1088/0004-637X/778/2/134), 2013.
- J. Park, **D. E. Innes**, **R. Bučik**, and Y.-J. Moon, The source regions of solar energetic particles detected by widely separated spacecraft, *Astrophys. J.*, **779**(2), 184, doi:[10.1088/0004-637X/779/2/184](https://doi.org/10.1088/0004-637X/779/2/184), 2013.
- G. Paschmann, **S. Haaland**, B. Sonnerup, and T. Knetter, Discontinuities and Alfvénic fluctuations in the solar wind, *Ann. Geophys.*, **31**(5), 871–887, doi:[10.5194/angeo-31-871-2013](https://doi.org/10.5194/angeo-31-871-2013), 2013.
- P. N. Peplowski, D. J. Lawrence, T. H. Prettyman, N. Yamashita, D. Bazell, W. C. Feldman, **L. Le Corre**, T. J. McCoy, **V. Reddy**, R. C. Reedy, C. T. Russell, and M. J. Toplis, Compositional variability on the surface of 4 Vesta revealed through GRaND measurements of high-energy gamma rays, *Meteorit. Planet. Sci.*, **48**(11), 2252–2270, doi:[10.1111/maps.12176](https://doi.org/10.1111/maps.12176), 2013.
- C. Perschke, Y. Narita, S. P. Gary, U. Motschmann, and **K.-H. Glassmeier**, Dispersion relation analysis of turbulent magnetic field fluctuations in fast solar wind, *Ann. Geophys.*, **31**(11), 1949–1955, doi:[10.5194/angeo-31-1949-2013](https://doi.org/10.5194/angeo-31-1949-2013), 2013.
- H. Peter**, Magnetic Field Diagnostics and Spatio-Temporal Variability of the Solar Transition Region, *Solar Phys.*, **288**, 531–547, doi:[10.1007/s11207-013-0270-3](https://doi.org/10.1007/s11207-013-0270-3), 2013.
- H. Peter**, **S. Bingert**, J. A. Klimchuk, C. de Forest, J. W. Cirtain, L. Golub, A. R. Winebarger, K. Kobayashi, and K. E. Korreck, Structure of solar coronal loops: from miniature to large-scale, *Astron. & Astrophys.*, **556**, A104, doi:[10.1051/0004-6361/201321826](https://doi.org/10.1051/0004-6361/201321826), 2013.
- C. M. Pieters, J. W. Boardman, M. Ohtake, T. Matsunaga, J. Haruyama, R. O. Green, **U. Mall**, M. I. Staid, P. J. Isaacson, Y. Yokota, S. Yamamoto, S. Besse, and J. M. Sunshine, One Moon, many measurements 1: Radiance values, *Icarus*, **226**(1), 951–963, doi:[10.1016/j.icarus.2013.07.008](https://doi.org/10.1016/j.icarus.2013.07.008), 2013.
- F. Plaschke, V. Angelopoulos, and **K.-H. Glassmeier**, Magnetopause surface waves: THEMIS observations compared to MHD theory, *J. Geophys. Res.*, **118**(4), 1483–1499, doi:[10.1002/jgra.50147](https://doi.org/10.1002/jgra.50147), 2013.
- J. Pratt**, A. Busse, and W.-C. Mueller, Fluctuation dynamo amplified by intermittent shear bursts in convectively driven magnetohydrodynamic turbulence, *Astron. & Astrophys.*, **557**, A76, doi:[10.1051/0004-6361/201321613](https://doi.org/10.1051/0004-6361/201321613), 2013.
- T. H. Prettyman, D. W. Mittlefehldt, N. Yamashita, A. W. Beck, W. C. Feldman, J. S. Hendricks, D. J. Lawrence, T. J. McCoy, H. Y. McSween, P. N. Peplowski, R. C. Reedy, M. J. Toplis, **L. Le Corre**, H. Mizzon, **V. Reddy**, T. N. Titus, C. A. Raymond, and C. T. Russell, Neutron absorption constraints on the composition of 4 Vesta, *Meteorit. Planet. Sci.*, **48**(11), 2211–2236, doi:[10.1111/maps.12244](https://doi.org/10.1111/maps.12244), 2013.
- C. Quintero Noda, V. Martinez Pillet, J. M. Borrero, and **S. K. Solanki**, Temporal relation between quiet-Sun transverse fields and the strong flows detected by IMAx/SUNRISE, *Astron. & Astrophys.*, **558**, A30, doi:[10.1051/0004-6361/201321719](https://doi.org/10.1051/0004-6361/201321719), 2013.
- A. Radioti, **E. Roussos**, D. Grodent, J.-C. Gérard, **N. Krupp**, D. G. Mitchell, J. Gustin, B. Bonfond, and W. Pryor, Signatures of magnetospheric injections in Saturn's aurora, *J. Geophys. Res.*, **118**(5), 1922–1933, doi:[10.1002/jgra.50161](https://doi.org/10.1002/jgra.50161), 2013.

- S. P. Rajaguru, S. Couvidat, X. Sun, K. Hayashi, and **H. Schunker**, Properties of high-frequency wave power halos around active regions: An analysis of multi-height data from HMI and AIA onboard SDO, *Solar Phys.*, **287**(1-2), 107–127, doi:[10.1007/s11207-012-0180-9](https://doi.org/10.1007/s11207-012-0180-9), 2013.
- V. Reddy**, **L. Le Corre**, D. P. O'Brien, **A. Nathues**, E. A. Cloutis, D. D. Durda, W. F. Bottke, **M. U. Bhatt**, D. Nesvorny, D. Buczkowski, J. E. C. Scully, E. M. Palmer, **H. Sierks**, P. J. Mann, K. J. Becker, A. W. Beck, D. Mittlefehldt, J.-Y. Li, R. Gaskell, C. T. Russell, M. J. Gaffey, H. Y. McSween, T. B. McCord, J.-P. Combe, and D. Blewett, Corrigendum to "Delivery of dark material to Vesta via carbonaceous chondritic impacts" [*Icarus* 221, pg 544, 2012], *Icarus*, **223**(1), 632–632, doi:[10.1016/j.icarus.2012.10.006](https://doi.org/10.1016/j.icarus.2012.10.006), 2013.
- V. Reddy**, **J.-Y. Li**, **L. Le Corre**, J. E. C. Scully, R. Gaskell, C. T. Russell, R. S. Park, **A. Nathues**, C. Raymond, M. J. Gaffey, **H. Sierks**, K. J. Becker, and L. A. McFadden, Comparing Dawn, Hubble Space Telescope, and ground-based interpretations of (4) Vesta, *Icarus*, **226**(1), 1103–1114, doi:[10.1016/j.icarus.2013.07.019](https://doi.org/10.1016/j.icarus.2013.07.019), 2013.
- L. Rezac**, A. A. Kutepov, A. Faure, **P. Hartogh**, and A. G. Feofilov, Rotational non-LTE in HCN in the thermosphere of Titan: Implications for the radiative cooling, *Astron. & Astrophys.*, **555**, A122, doi:[10.1051/0004-6361/201321231](https://doi.org/10.1051/0004-6361/201321231), 2013.
- D. Ricci, A. Elyiv, F. Finet, O. Wertz, K. Alsubai, T. Anguita, V. Bozza, P. Browne, M. Burgdorf, S. C. Novati, P. Dodds, M. Dominik, S. Dreizler, T. Gerner, M. Glittrup, F. Grundahl, S. Hardis, K. Harpsøe, T. C. Hinse, A. Hornstrup, M. Hundertmark, U. G. Jorgensen, N. Kains, E. Kerins, C. Liebig, G. Maier, L. Mancini, G. Masi, M. Mathiasen, M. Penny, S. Proft, S. Rahvar, G. Scarpetta, K. Sahu, S. Schaefer, F. Schoenebeck, R. Schmidt, J. Skottfelt, **C. Snodgrass**, J. Southworth, C. C. Thoene, J. Wambsganss, F. Zimmer, M. Zub, and J. Surdej, Flux and color variations of the doubly imaged quasar UM673, *Astron. & Astrophys.*, **551**, A104, doi:[10.1051/0004-6361/201118755](https://doi.org/10.1051/0004-6361/201118755), 2013.
- T. L. Riethmüller**, **S. K. Solanki**, **J. Hirzberger**, **S. Danilovic**, **P. Barthol**, T. Berkefeld, **A. Gandorfer**, **L. Gizon**, M. Knölker, W. Schmidt, and J. C. Del Toro Iniesta, First High-Resolution Images of the Sun in the 2796 Å Mg II k Line, *Astrophys. J.*, **776**(1), L13, doi:[10.1088/2041-8205/776/1/L13](https://doi.org/10.1088/2041-8205/776/1/L13), 2013.
- T. L. Riethmüller**, **S. K. Solanki**, **M. van Noort**, and **S. K. Tiwari**, Vertical flows and mass flux balance of sunspot umbral dots, *Astron. & Astrophys.*, **554**, A53, doi:[10.1051/0004-6361/201321075](https://doi.org/10.1051/0004-6361/201321075), 2013.
- J. d. I. C. Rodriguez, L. R. van der Voort, H. Socas-Navarro, and **M. van Noort**, Physical properties of a sunspot chromosphere with umbral flashes, *Astron. & Astrophys.*, **556**, A115, doi:[10.1051/0004-6361/201321629](https://doi.org/10.1051/0004-6361/201321629), 2013.
- T. Roudier, M. Rieutord, V. Prat, J. M. Malherbe, N. Renon, Z. Frank, M. Švanda, T. Berger, **R. Burston**, and **L. Gizon**, Comparison of solar horizontal velocity fields from SDO/HMI and Hinode data, *Astron. & Astrophys.*, **552**, A113, doi:[10.1051/0004-6361/201220867](https://doi.org/10.1051/0004-6361/201220867), 2013.
- E. Roussos**, **M. Andriopoulou**, **N. Krupp**, **A. Kotova**, C. Paranicas, S. M. Krimigis, and D. G. Mitchell, Numerical simulation of energetic electron microsignature drifts at Saturn: Methods and applications, *Icarus*, **226**(2), 1595–1611, doi:[10.1016/j.icarus.2013.08.023](https://doi.org/10.1016/j.icarus.2013.08.023), 2013.
- C. T. Russell, C. A. Raymond, R. Jaumann, H. Y. McSween, M. C. De Sanctis, **A. Nathues**, T. H. Prettyman, E. Ammannito, **V. Reddy**, F. Preusker, D. P. O'Brien, S. Marchi, B. W. Denevi, D. L. Buczkowski, C. M. Pieters, T. B. McCord, J.-Y. Li, D. W. Mittlefehldt, J.-P. Combe, D. A. Williams, H. Hiesinger, R. A. Yingst, C. A. Polanskey, and S. P. Joy, Dawn completes its mission at 4 Vesta, *Meteorit. Planet. Sci.*, **48**(11), 2076–2089, doi:[10.1111/maps.12091](https://doi.org/10.1111/maps.12091), 2013.
- A. M. Rymer, D. G. Mitchell, T. W. Hill, **E. A. Kronberg**, **N. Krupp**, and C. M. Jackman, Saturn's magnetospheric refresh rate, *Geophys. Res. Lett.*, **40**, 2479–2483, doi:[10.1002/grl.50530](https://doi.org/10.1002/grl.50530), 2013.
- J. Sanchez, R. Michelsen, V. Reddy, and **A. Nathues**, Surface composition and taxonomic classification of a group of near-Earth and Mars-crossing asteroids, *Icarus*, **225**, 131–140, doi:[10.1016/j.icarus.2013.02.036](https://doi.org/10.1016/j.icarus.2013.02.036), 2013.

- B. Schmieder, Y. Guo, F. Moreno-Insertis, G. Aulanier, L. Yelles Chaouche, N. Nishizuka, L. K. Harra, **J. K. Thalmann**, S. Vargas Dominguez, and Y. Liu, Twisting solar coronal jet launched at the boundary of an active region, *Astron. & Astrophys.*, **559**, A1, doi:[10.1051/0004-6361/201322181](https://doi.org/10.1051/0004-6361/201322181), 2013.
- D. J. Schmit** and S. Gibson, Diagnosing the Prominence-Cavity Connection, *Astrophys. J.*, **770**(1), 35, doi:[10.1088/0004-637X/770/1/35](https://doi.org/10.1088/0004-637X/770/1/35), 2013.
- D. J. Schmit**, S. Gibson, M. Luna, J. Karpen, and **D. Innes**, Prominence Mass Supply and the Cavity, *Astrophys. J.*, **779**(2), doi:[10.1088/0004-637X/779/2/156](https://doi.org/10.1088/0004-637X/779/2/156), 2013.
- S. E. Schröder**, **T. Maue**, **P. G. Marques**, S. Mottola, K. M. Aye, **H. Sierks**, H. U. Keller, and **A. Nathues**, In-flight calibration of the Dawn Framing Camera, *Icarus*, **226**(2), 1304–1317, doi:[10.1016/j.icarus.2013.07.036](https://doi.org/10.1016/j.icarus.2013.07.036), 2013.
- H. Schunker**, **L. Gizon**, **R. H. Cameron**, and **A. C. Birch**, Helioseismology of sunspots: how sensitive are travel times to the Wilson depression and to the subsurface magnetic field?, *Astron. & Astrophys.*, **558**, A130, doi:[10.1051/0004-6361/201321485](https://doi.org/10.1051/0004-6361/201321485), 2013.
- D. B. Seaton, D. Berghmans, B. Nicula, J.-P. Halain, A. D. Groof, T. Thibert, D. S. Bloomfield, C. L. Raftery, P. T. Gallagher, F. Auchère, J.-M. Defise, E. D'Huys, J.-H. Lecat, E. Mazy, P. Rochus, L. Rossi, **U. Schühle**, V. Slemzin, M. S. Yalim, and J. Zender, The SWAP EUV Imaging Telescope Part I: Instrument Overview and Pre-Flight Testing, *Solar Phys.*, **286**, 43–65, doi:[10.1007/s11207-012-0114-6](https://doi.org/10.1007/s11207-012-0114-6), 2013.
- J. Shen**, H. Ji, **T. Wiegmann**, and **B. Inhester**, Double Power-law Distribution of Magnetic Energy in the Solar Corona over an Active Region, *Astrophys. J.*, **764**, 86, doi:[10.1088/0004-637X/764/1/86](https://doi.org/10.1088/0004-637X/764/1/86), 2013.
- J. Skottfelt, D. M. Bramich, R. F. Jaimes, U. G. Jorgensen, N. Kains, K. B. W. Harpsøe, C. Liebig, M. T. Penny, K. A. Alsubai, J. M. Andersen, V. Bozza, P. Browne, S. C. Novati, Y. Damerdj, C. Diehl, M. Dominik, A. Elyiv, E. Giannini, F. Hessman, T. C. Hinse, M. Hundertmark, D. Juncher, E. Kerins, H. Korhonen, L. Mancini, R. Martin, M. Rabus, S. Rahvar, G. Scarpetta, J. Southworth, **C. Snodgrass**, R. A. Street, J. Surdej, J. Tregloan-Reed, C. Vilela, and A. Williams, EMCCD photometry reveals two new variable stars in the crowded central region of the globular cluster NGC 6981 (Research Note), *Astron. & Astrophys.*, **553**, A111, doi:[10.1051/0004-6361/201321430](https://doi.org/10.1051/0004-6361/201321430), 2013.
- J. Skottfelt, D. M. Bramich, R. F. Jaimes, U. G. Jorgensen, N. Kains, K. B. W. Harpsøe, C. Liebig, M. T. Penny, K. A. Alsubai, J. M. Andersen, V. Bozza, P. Browne, S. C. Novati, Y. Damerdj, C. Diehl, M. Dominik, A. Elyiv, E. Giannini, F. Hessman, T. C. Hinse, M. Hundertmark, D. Juncher, E. Kerins, H. Korhonen, L. Mancini, R. Martin, M. Rabus, S. Rahvar, G. Scarpetta, J. Southworth, **C. Snodgrass**, R. A. Street, J. Surdej, J. Tregloan-Reed, C. Vilela, and A. Williams, EMCCD photometry reveals two new variable stars in the crowded central region of the globular cluster NGC 6981 (vol 553, A111, 2013), *Astron. & Astrophys.*, **558**, C1, doi:[10.1051/0004-6361/201321430e](https://doi.org/10.1051/0004-6361/201321430e), 2013.
- C. Snodgrass**, **C. Tubiana**, D. M. Bramich, K. Meech, **H. Boehnhardt**, and L. Barrera, Beginning of activity in 67P/Churyumov-Gerasimenko and predictions for 2014-2015, *Astron. & Astrophys.*, **557**, A33, doi:[10.1051/0004-6361/201322020](https://doi.org/10.1051/0004-6361/201322020), 2013.
- R. Soja, N. Altobelli, **H. Krüger**, and V. Sterken, Dust environment prediction for the ESA L-Class mission candidate JUICE, *Planet. Space Sci.*, **75**, 117–128, doi:[10.1016/j.pss.2012.11.010](https://doi.org/10.1016/j.pss.2012.11.010), 2013.
- S. K. Solanki**, **N. A. Krivova**, and J. D. Haigh, Solar Irradiance Variability and Climate, *Annual Rev. Astron. Astrophys.*, **51**, 311–351, doi:[10.1146/annurev-astro-082812-141007](https://doi.org/10.1146/annurev-astro-082812-141007), 2013.
- S. K. Solanki** and Y. C. Unruh, Solar irradiance variability, *Astron. Nachr.*, **334**(1-2), 145–150, doi:[10.1002/asna.201211752](https://doi.org/10.1002/asna.201211752), 2013.
- J. Southworth, L. Mancini, P. Browne, M. Burgdorf, S. C. Novati, M. Dominik, T. Gerner, T. C. Hinse, U. G. Jorgensen, N. Kains, D. Ricci, S. Schaefer, F. Schoenebeck, J. Tregloan-Reed, K. A. Alsubai, V. Bozza, G. Chen, P. Dodds, S. Dreizler, X.-S. Fang, F. Finet, S.-H. Gu, S. Hardis, K. Harpsøe, T. Henning, M. Hundertmark, J. Jessen-Hansen, E. Kerins, H. Kjeldsen, C. Liebig, M. N. Lund, M. Lundkvist,

- M. Mathiasen, N. Nikolov, M. T. Penny, S. Proft, S. Rahvar, K. Sahu, G. Scarpetta, J. Skottfelt, **C. Snodgrass**, J. Surdej, and O. Wertz, High-precision photometry by telescope defocusing - V. WASP-15 and WASP-16, *Mon. Not. Roy. Astron. Soc.*, **434**(2), 1300–1308, doi:[10.1093/mnras/stt1089](https://doi.org/10.1093/mnras/stt1089), 2013.
- M. Stangalini**, **S. K. Solanki**, **R. Cameron**, and V. M. Pillet, First evidence of interaction between longitudinal and transverse waves in solar magnetic elements, *Astron. & Astrophys.*, **554**, A115, doi:[10.1051/0004-6361/201220933](https://doi.org/10.1051/0004-6361/201220933), 2013
- V. J. Sterken, N. Altobelli, S. Kempf, **H. Krüger**, R. Srama, **P. Strub**, and E. Gruen, The filtering of interstellar dust in the solar system, *Astron. & Astrophys.*, **552**, A130, doi:[10.1051/0004-6361/201219609](https://doi.org/10.1051/0004-6361/201219609), 2013.
- R. A. Street, J.-Y. Choi, Y. Tsapras, C. Han, K. Furusawa, M. Hundertmark, A. Gould, T. Sumi, I. A. Bond, D. Wouters, R. Zellem, A. Udalski, **C. Snodgrass**, K. Horne, M. Dominik, P. Browne, N. Kains, D. M. Bramich, D. Bajek, I. A. Steele, S. Ipatov, F. Abe, D. P. Bennett, C. S. Botzler, P. Chote, M. Freeman, A. Fukui, P. Harris, Y. Itow, C. H. Ling, K. Masuda, Y. Matsubara, N. Miyake, Y. Muraki, T. Nagayama, S. Nishimaya, K. Ohnishi, N. Rattenbury, To. Saito, D. J. Sullivan, D. Suzuki, W. L. Sweatman, P. J. Tristram, K. Wada, P. C. M. Yock, M. K. Szymanski, M. Kubiak, G. Pietrzynski, I. Soszynski, R. Poleski, K. Ulaczyk, L. Wyrzykowski, J. Yee, S. Dong, I.-G. Shin, C.-U. Lee, J. Skowron, L. Andrade De Almeida, D. L. DePoy, B. S. Gaudi, L.-W. Hung, F. Jablonski, S. Kaspi, N. Klein, K.-H. Hwang, J.-R. Koo, D. Maoz, J. A. Munoz, R. W. Pogge, D. Polishhook, A. Shporer, J. McCormick, G. Christie, T. Natusch, B. Allen, J. Drummond, D. Moorhouse, G. Thornley, M. Knowler, M. Bos, G. Bolt, J.-P. Beaulieu, M. D. Albrow, V. Batista, S. Brilliant, J. A. R. Caldwell, A. Cassan, A. Cole, E. Corrales, Ch. Coutures, S. Dieters, D. D. Prester, J. Donatowicz, P. Fouque, E. Bachelet, J. Greenhill, S. R. Kane, D. Kubas, J.-B. Marquette, R. Martin, J. Menzies, K. R. Pollard, K. C. Sahu, J. Wambsganss, A. Williams, M. Zub, K. A. Alsubai, V. Bozza, M. J. Burgdorf, S. C. Novati, P. Dodds, S. Dreizler, F. Finet, T. Gerner, S. Hardis, K. Harpsoe, F. Hessman, T. C. Hinse, U. G. Jorgensen, E. Kerins, C. Liebig, L. Mancini, M. Mathiasen, M. T. Penny, S. Proft, S. Rahvar, D. Ricci, G. Scarpetta, S. Schaefer, F. Schoenebeck, J. Southworth, J. Surdej, and The RoboNet Collaboration, MOA-2010-BLG-073L: An M-Dwarf with a Substellar Companion at the Planet/Brown Dwarf Boundary, *Astrophys. J.*, **763**(1), 67, doi:[10.1088/0004-637X/763/1/67](https://doi.org/10.1088/0004-637X/763/1/67), 2013.
- M. Švanda, T. Roudier, M. Rieutord, **R. Burston**, and **L. Gizon**, Comparison of solar surface flows inferred from time-distance helioseismology and coherent structure tracking using HMI/SDO observations, *Astrophys. J.*, **771**, 32, doi:[10.1088/0004-637X/771/1/32](https://doi.org/10.1088/0004-637X/771/1/32), 2013.
- T. Tadesse, **T. Wiegmann**, **B. Inhester**, P. MacNeice, A. Pevtsov, and X. Sun, Full-disk nonlinear force-free field extrapolation of SDO/HMI and SOLIS/VSM magnetograms, *Astron. & Astrophys.*, **550**, A14, doi:[10.1051/0004-6361/201220044](https://doi.org/10.1051/0004-6361/201220044), 2013.
- T. Tadesse, **T. Wiegmann**, P. J. MacNeice, and K. Olson, Modeling coronal magnetic field using spherical geometry: cases with several active regions, *Astrophys. Space Sci.*, **347**(1), 21–27, doi:[10.1007/s10509-013-1493-3](https://doi.org/10.1007/s10509-013-1493-3), 2013.
- K. Takahashi, M. D. Hartinger, V. Angelopoulos, **K.-H. Glassmeier**, and H. J. Singer, Multispacecraft observations of fundamental poloidal waves without ground magnetic signatures, *J. Geophys. Res.*, **118**(7), 4319–4334, doi:[10.1002/jgra.50405](https://doi.org/10.1002/jgra.50405), 2013.
- N. A. Teanby, P. G. J. Irwin, C. A. Nixon, R. Courtin, B. M. Swinyard, R. Moreno, E. Lellouch, **M. Rengel**, and **P. Hartogh**, Constraints on Titan's middle atmosphere ammonia abundance from Herschel/SPIRE sub-millimetre spectra, *Planet. Space Sci.*, **75**, 136–147, doi:[10.1016/j.pss.2012.11.008](https://doi.org/10.1016/j.pss.2012.11.008), 2013.
- J. K. Thalmann**, **S. K. Tiwari**, and **T. Wiegmann**, Comparison of force-free coronal magnetic field modeling using vector fields from Hinode and Solar Dynamics Observatory, *Astrophys. J.*, **769**, 59–68, doi:[10.1088/0004-637X/769/1/59](https://doi.org/10.1088/0004-637X/769/1/59), 2013.
- G. Thangjam**, **V. Reddy**, **L. Le Corre**, **A. Nathues**, **H. Sierks**, H. Hiesinger, J.-Y. Li, **J. A. Sanchez**, C. T. Russell, R. Gaskell, and C. Raymond, Lithologic mapping of HED terrains on Vesta using Dawn Framing Camera color data, *Meteorit. Planet. Sci.*, **48**, 2199–2210, doi:[10.1111/maps.12132](https://doi.org/10.1111/maps.12132), 2013.

- P. Thomas, M. A'Hearn, M. J. S. Belton, D. Brownlee, B. Carcich, B. Hermalyn, K. Klaasen, S. Sackett, P. H. Schultz, J. Veverka, S. Bhaskaran, D. Bodewits, S. Chesley, B. Clark, T. Farnham, O. Groussin, A. Harris, **J. Kissel**, J.-Y. Li, K. Meech, J. Melosh, A. Quick, J. Richardson, J. Sunshine, and D. Wellnitz, The nucleus of Comet 9P/Tempel 1: Shape and geology from two flybys, *Icarus*, **222**(2), 453–466, doi:[10.1016/j.icarus.2012.02.037](https://doi.org/10.1016/j.icarus.2012.02.037), 2013.
- P. C. Thomas, M. F. A'Hearn, J. Veverka, M. J. S. Belton, **J. Kissel**, K. P. Klaasen, L. A. McFadden, H. J. Melosh, P. H. Schultz, S. Besse, B. T. Carcich, T. L. Farnham, O. Groussin, B. Hermalyn, J.-Y. Li, D. J. Lindler, C. M. Lisse, K. Meech, and J. E. Richardson, Shape, density, and geology of the nucleus of Comet 103P/Hartley 2, *Icarus*, **222**(2), 550–558, doi:[10.1016/j.icarus.2012.05.034](https://doi.org/10.1016/j.icarus.2012.05.034), 2013.
- J. G. Timothy, **K. Wilhelm**, and L. Xia, The extra-terrestrial vacuum-ultraviolet wavelength range, in: *Observing Photons in Space — A Guide to Experimental Space Astronomy* (edited by M. C. E. Huber, A. Pauluhn, J. L. Culhane, J. G. Timothy, K. Wilhelm, and A. Zehnder), vol. 9 of *ISSI Scientific Report Series*, pp. 93–120, Springer, Heidelberg, 2 ed., 2013, ISBN 978-1-4614-7803-4.
- S. K. Tiwari**, **M. van Noort**, **A. Lagg**, and **S. K. Solanki**, Structure of sunspot penumbral filaments: a remarkable uniformity of properties, *Astron. & Astrophys.*, **557**, A25, doi:[10.1051/0004-6361/201321391](https://doi.org/10.1051/0004-6361/201321391), 2013.
- G. P. Tozzi, E. M. Epifani, O. R. Hainaut, P. Patriarchi, L. Lara, J. R. Brucato, **H. Boehnhardt**, M. D. Bó, J. Licandro, K. Meech, and P. Tanga, Activity of Comet 103P/Hartley 2 at the time of the EPOXI mission fly-by, *Icarus*, **222**, 766–773, doi:[10.1016/j.icarus.2012.05.037](https://doi.org/10.1016/j.icarus.2012.05.037), 2013.
- I. G. Usoskin, B. Kromer, F. Ludlow, J. Beer, M. Friedrich, G. A. Kovaltsov, **S. K. Solanki**, and L. Wacker, The AD775 cosmic event revisited: the Sun is to blame, *Astron. & Astrophys.*, **552**, L3, doi:[10.1051/0004-6361/201321080](https://doi.org/10.1051/0004-6361/201321080), 2013.
- M. van Noort**, **A. Lagg**, **S. K. Tiwari**, and **S. K. Solanki**, Peripheral downflows in sunspot penumbrae, *Astron. & Astrophys.*, **557**, A24, doi:[10.1051/0004-6361/201321073](https://doi.org/10.1051/0004-6361/201321073), 2013.
- T. van Wettum**, **S. Bingert**, and **H. Peter**, Parameterisation of coronal heating: spatial distribution and observable consequences, *Astron. & Astrophys.*, **554**, A39, doi:[10.1051/0004-6361/201321297](https://doi.org/10.1051/0004-6361/201321297), 2013.
- V. M. Vasyliūnas**, Role of the solar wind in the structure and dynamics of magnetospheres, *AIP Conference Proceedings*, **1539**, 376–381, doi:[10.1063/1.4811064](https://doi.org/10.1063/1.4811064), 2013.
- V. M. Vasyliūnas**, Time scale of the largest imaginable magnetic storm, *Nonlin. Proc. Geophys.*, **20**, 19–23, doi:[10.5194/npg-20-19-2013](https://doi.org/10.5194/npg-20-19-2013), 2013.
- P. Vemareddy, A. Ambastha, **T. Wiegmann**, Magnetic structure of solar active region NOAA 11158, *Bull. Astron. Soc. India*, **41**(3), 183–193, 2013
- M. Verma and **R. Yadav**, Supercriticality to subcriticality in dynamo transitions, *Phys. Plasmas*, **20**, 072307, doi:[10.1063/1.4813261](https://doi.org/10.1063/1.4813261), 2013.
- Y. Vernisse**, H. Kriegel, S. Wiehle, U. Motschmann, and K.-H. Glassmeier, Stellar winds and planetary bodies simulations: Lunar type interaction in super-Alfvenic and sub-Alfvenic flows, *Planet. Space Sci.*, **84**, 37–47, doi:[10.1016/j.pss.2013.04.004](https://doi.org/10.1016/j.pss.2013.04.004), 2013.
- J. Veverka, K. Klaasen, M. A'Hearn, M. Belton, D. Brownlee, S. Chesley, B. Clark, T. Economou, R. Farquhar, S. F. Green, O. Groussin, A. Harris, **J. Kissel**, J.-Y. Li, K. Meech, J. Melosh, J. Richardson, P. Schultz, J. Silen, J. Sunshine, P. Thomas, S. Bhaskaran, D. Bodewits, B. Carcich, A. Chevront, T. Farnham, S. Sackett, D. Wellnitz, and A. Wolf, Return to Comet Tempel 1: Overview of Stardust-NExT results, *Icarus*, **222**(2), 424–435, doi:[10.1016/j.icarus.2012.03.034](https://doi.org/10.1016/j.icarus.2012.03.034), 2013.
- G. L. Villanueva, M. J. Mumma, R. E. Novak, Y. L. Radeva, H. U. Käufel, A. Smette, A. Tokunaga, A. Khayat, T. Encrenaz, and **P. Hartogh**, A sensitive search for organics (CH₄, CH₃OH, H₂CO, C₂H₆, C₂H₂, C₂H₄), hydroperoxyl (HO₂), nitrogen compounds (N₂O, NH₃, HCN) and chlorine species (HCl, CH₃Cl) on Mars us-

- ing ground-based high-resolution infrared spectroscopy, *Icarus*, **223**, 11–27, doi:[10.1016/j.icarus.2012.11.013](https://doi.org/10.1016/j.icarus.2012.11.013), 2013.
- J.-B. Vincent**, L. M. Lara, G. P. Tozzi, Z.-Y. Lin, and **H. Sierks**, Spin and activity of comet 67P/Churyumov-Gerasimenko, *Astron. & Astrophys.*, **549**, A121, doi:[10.1051/0004-6361/201219350](https://doi.org/10.1051/0004-6361/201219350), 2013.
- J.-B. Vincent**, P. Schenk, **A. Nathues**, **H. Sierks**, **M. Hoffmann**, R. W. Gaskell, S. Marchi, D. P. O'Brien, M. Sykes, C. T. Russell, M. Fulchignoni, H. U. Keller, C. Raymond, E. Palmer, and F. Preusker, Crater Depth-to-Diameter Distribution and Surface Properties of (4)Vesta, *Planet. Space Sci.*, doi:[10.1016/j.pss.2013.09.003](https://doi.org/10.1016/j.pss.2013.09.003), 2013, available only online pending paper publication.
- R. Wang, A. Du, R. Nakamura, Q. Lu, Y. V. Khotyaintsev, M. Volwerk, T. Zhang, **E. A. Kronberg**, **P. W. Daly**, and A. N. Fazakerley, Observation of multiple sub-cavities adjacent to single separatrix, *Geophys. Res. Lett.*, **40**, 2511–2517, doi:[10.1002/grl.50537](https://doi.org/10.1002/grl.50537), 2013.
- X. Wang, S. W. McIntosh, **W. Curdt**, H. Tian, **H. Peter**, and L.-D. Xia, Temperature dependence of ultraviolet line parameters in network and internetwork regions of the quiet Sun and coronal holes, *Astron. & Astrophys.*, **557**, A126, doi:[10.1051/0004-6361/201220197](https://doi.org/10.1051/0004-6361/201220197), 2013.
- Y. Wei**, **M. Fränz**, **E. Dubinin**, M. He, Z. Ren, B. Zhao, J. Liu, W. Wan, K. Yumoto, S. Watari, and S. Alex, Can a nightside geomagnetic Delta H observed at the equator manifest a penetration electric field?, *J. Geophys. Res.*, **118**(6), 3557–3567, doi:[10.1002/jgra.50174](https://doi.org/10.1002/jgra.50174), 2013.
- T. Wiegelmann**, **S. K. Solanki**, J. M. Borrero, **H. Peter**, **P. Barthol**, **A. Gandorfer**, V. Martínez Pillet, W. Schmidt, and M. Knölker, Evolution of the Fine Structure of Magnetic Fields in the Quiet Sun: Observations from Sunrise/IMaX and Extrapolations, *Solar Phys.*, **283**, 253–272, doi:[10.1007/s11207-013-0249-0](https://doi.org/10.1007/s11207-013-0249-0), 2013.
- T. Wiengarten, J. Kleimann, H. Fichtner, **R. Cameron**, **J. Jiang**, R. Kissmann, and K. Scherer, MHD simulation of the inner-heliospheric magnetic field, *J. Geophys. Res.*, **118**, 29–44, doi:[10.1029/2012JA018089](https://doi.org/10.1029/2012JA018089), 2013.
- K. Wilhelm** and B. N. Dwivedi, Gravity, massive particles, photons and Shapiro delay, *Astrophys. Space Sci.*, **343**, 145–151, doi:[10.1007/s10509-012-1207-2](https://doi.org/10.1007/s10509-012-1207-2), 2013.
- K. Wilhelm** and B. N. Dwivedi, Increase of the mean Sun-Earth distance caused by a secular mass accumulation, *Astrophys. Space Sci.*, **347**, 41–45, doi:[10.1007/s10509-013-1487-1](https://doi.org/10.1007/s10509-013-1487-1), 2013.
- K. Wilhelm** and C. Fröhlich, Photons from source to detector, in: *Observing Photons in Space — A Guide to Experimental Space Astronomy* (edited by M. C. E. Huber, A. Pauluhn, J. L. Culhane, J. G. Timothy, K. Wilhelm, and A. Zehnder), vol. 9 of *ISSI Scientific Report Series*, pp. 21–53, Springer, Heidelberg, 2 ed., 2013, ISBN 978-1-4614-7803-4.
- K. Wilhelm**, M. C. E. Huber, J. L. Culhane, A. Pauluhn, J. G. Timothy, and A. Zehnder, SI units, in: *Observing Photons in Space — A Guide to Experimental Space Astronomy* (edited by M. C. E. Huber, A. Pauluhn, J. L. Culhane, J. G. Timothy, K. Wilhelm, and A. Zehnder), vol. 9 of *ISSI Scientific Report Series*, Springer, Heidelberg, 2 ed., 2013, ISBN 978-1-4614-7803-4.
- K. Wilhelm**, H. Wilhelm, and B. N. Dwivedi, An impact model of Newton's law of gravitation, *Astrophys. Space Sci.*, **343**, 135–144, doi:[10.1007/s10509-012-1206-3](https://doi.org/10.1007/s10509-012-1206-3), 2013.
- R. M. E. Williams, J. P. Grotzinger, W. E. Dietrich, S. Gupta, D. Y. Sumner, R. C. Wiens, N. Mangold, M. C. Malin, K. S. Edgett, S. Maurice, O. Forni, O. Gasnault, A. Ollila, H. E. Newsom, G. Dromart, M. C. Palucis, R. A. Yingst, R. B. Anderson, K. E. Herkenhoff, S. Le Mouelic, **W. Goetz**, M. B. Madsen, A. Koefoed, J. K. Jensen, J. C. Bridges, S. P. Schwenzer, K. W. Lewis, K. M. Stack, D. Rubin, L. C. Kah, J. F. Bell, III, J. D. Farmer, R. Sullivan, T. Van Beek, D. L. Blaney, O. Pariser, R. G. Deen, and The MSL Sci Team, Martian Fluvial Conglomerates at Gale Crater, *Science*, **340**(6136), 1068–1072, doi:[10.1126/science.1237317](https://doi.org/10.1126/science.1237317), 2013.

- M. Woodard, J. Schou, **A. C. Birch**, and T. P. Larson, Global-oscillation eigenfunction measurements of solar meridional flow, *Solar Phys.*, **287**(1-2), 129–147, doi:[10.1007/s11207-012-0075-9](https://doi.org/10.1007/s11207-012-0075-9), 2013.
- R. Yadav**, **T. Gastine**, **U. Christensen**, and **L. Duarte**, Consistent scaling laws in anelastic spherical shell dynamos, *Astrophys. J.*, **774**, 6, doi:[10.1088/0004-637X/774/1/6](https://doi.org/10.1088/0004-637X/774/1/6), 2013.
- R. Yadav**, **T. Gastine**, and **U. R. Christensen**, Scaling laws in spherical shell dynamos with free-slip boundaries, *Icarus*, **225**, 185–193, doi:[10.1016/j.icarus.2013.02.030](https://doi.org/10.1016/j.icarus.2013.02.030), 2013.
- L. Yang, J. He, **H. Peter**, C. Tu, W. Chen, L. Zhang, E. Marsch, L. Wang, X. Feng, and L. Yan, Injection of Plasma into the Nascent Solar Wind via Reconnection Driven by Supergranular Advection, *Astrophys. J.*, **770**(1), 6, doi:[10.1088/0004-637X/770/1/6](https://doi.org/10.1088/0004-637X/770/1/6), 2013.
- L. Yang, J. He, **H. Peter**, C. Tu, L. Zhang, X. Feng, and S. Zhang, Numerical Simulations of Chromospheric Anemone Jets Associated with Moving Magnetic Features, *Astrophys. J.*, **777**(1), 16, doi:[10.1088/0004-637X/777/1/16](https://doi.org/10.1088/0004-637X/777/1/16), 2013.
- S. Yang**, **J. Büchner**, J. C. Sanos, and H. Zhang, Evolution of relative magnetic helicity: method of computation and application to a simulated solar corona above an Active Region, *Solar Phys.*, **283**, 369–382, doi:[10.1007/s11207-013-0236-5](https://doi.org/10.1007/s11207-013-0236-5), 2013.
- Z. H. Yao, V. Angelopoulos, Z. Y. Pu, S. Y. Fu, M. Kubyskhina, J. Liu, X. N. Chu, T. Nishimura, X. Cao, A. M. Du, C. Yue, Q. Q. Shi, and **Y. Wei**, Conjugate observations of flow diversion in the magnetotail and auroral arc extension in the ionosphere, *J. Geophys. Res.*, **118**(8), 4811–4816, doi:[10.1002/jgra.50419](https://doi.org/10.1002/jgra.50419), 2013.
- J. C. Yee, L.-W. Hung, I. A. Bond, W. Allen, L. A. G. Monard, M. D. Albrow, P. Fouque, M. Dominik, Y. Tsapras, A. Udalski, A. Gould, R. Zellem, M. Bos, G. W. Christie, D. L. DePoy, S. Dong, J. Drummond, B. S. Gaudi, E. Gorbikov, C. Han, S. Kaspi, N. Klein, C.-U. Lee, D. Maoz, J. McCormick, D. Moorhouse, T. Natusch, M. Nola, B.-G. Park, R. W. Pogge, D. Polishook, A. Shporer, Y. Shvartzvald, J. Skowron, G. Thornley, F. Abe, D. P. Bennett, C. S. Botzler, P. Chote, M. Freeman, A. Fukui, K. Furusawa, P. Harris, Y. Itow, C. H. Ling, K. Masuda, Y. Matsubara, N. Miyake, K. Ohnishi, N. J. Rattenbury, To. Saito, D. J. Sullivan, T. Sumi, D. Suzuki, W. L. Sweatman, P. J. Tristram, K. Wada, P. C. M. Yock, M. K. Szymanski, I. Soszynski, M. Kubiak, R. Poleski, K. Ulaczyk, G. Pietrzynski, L. Wyrzykowski, E. Bachelet, V. Batista, T. G. Beatty, J.-P. Beaulieu, C. S. Bennett, R. Bowens-Rubin, S. Brilliant, J. A. R. Caldwell, A. Cassan, A. A. Cole, E. Corrales, C. Coutures, S. Dieters, D. D. Prester, J. Donatowicz, J. Greenhill, C. B. Henderson, D. Kubas, J.-B. Marquette, R. Martin, J. W. Menzies, B. Shappee, A. Williams, D. Wouters, J. van Saders, M. Zub, R. A. Street, K. Horne, D. M. Bramich, I. A. Steele, K. A. Alsubai, V. Bozza, P. Browne, M. J. Burgdorf, S. C. Novati, P. Dodds, F. Finet, T. Gerner, S. Hardis, K. Harpsoe, F. V. Hessman, T. C. Hinse, M. Hundertmark, U. G. Jorgensen, N. Kains, E. Kerins, C. Liebig, L. Mancini, M. Mathiasen, M. T. Penny, S. Proft, S. Rahvar, D. Ricci, K. C. Sahu, G. Scarpetta, S. Schaefer, F. Schoenebeck, **C. Snodgrass**, J. Southworth, J. Surdej, J. Wambsganss, and The MFun Collaboration, MOA-2010-BLG-311: A Planetary Candidate below the Threshold of Reliable Detection, *Astrophys. J.*, **769**(1), 77, doi:[10.1088/0004-637X/769/1/77](https://doi.org/10.1088/0004-637X/769/1/77), 2013.
- K. L. Yeo**, **S. K. Solanki**, and **N. A. Krivova**, Intensity contrast of solar network and faculae, *Astron. & Astrophys.*, **550**, A95, doi:[10.1051/0004-6361/201220682](https://doi.org/10.1051/0004-6361/201220682), 2013.
- R. A. Yingst, L. C. Kah, M. Palucis, R. M. E. Williams, J. Garvin, J. C. Bridges, N. Bridges, R. G. Deen, J. Farmer, O. Gasnault, **W. Goetz**, V. E. Hamilton, V. Hipkin, J. K. Jensen, P. L. King, A. Koefoed, S. P. Le Mouelic, M. B. Madsen, N. Mangold, J. Martinez-Frias, S. Maurice, E. M. McCartney, H. Newsom, O. Pariser, V. H. Sautter, and R. C. Wiens, Characteristics of pebble- and cobble-sized clasts along the Curiosity rover traverse from Bradbury Landing to Rocknest, *J. Geophys. Res.*, **118**(11), 2361–2380, doi:[10.1002/2013JE004435](https://doi.org/10.1002/2013JE004435), 2013.

(Gesamt: 235 / Total: 235)

3.2 Doktorarbeiten / *PhD theses*

Philippe-André Bourdin, Observationally driven 3D MHD model of the solar corona above a magnetically active region, Georg-August-Universität Göttingen, 2013.

David Bühler, Analysis of small scale solar magnetic fields using Hinode SOT/SP, Georg-August-Universität Göttingen, 2013.

Lihui Chai, Low-frequency Waves in Magnetic Reconnection and Solitary Kinetic Alfvén Waves in Adiabatic Process, Hefei, China, 2013.

Neda Dadashigharehbalagh, Diagnostic of the solar transition region and corona from VUV spectroscopy and imaging, Technische Universität Braunschweig, 2013.

Konstantin Finke, Kinematic dynamo onset and magnetic field saturation in rotating spherical Couette and periodic box simulations, Georg-August Universität Göttingen, 2013.

Bastian Gundlach, Surface properties of small solar system bodies, Technische Universität Braunschweig, 2013.

Daniel Heyner, Das Magnetfeld des Merkur: Über den Einfluss der Magnetosphäre auf den Dynamo im Planeteninneren, Technische Universität Braunschweig, 2013.

Shahin Jafarzadeh, Dynamics of magnetic bright points in the lower solar atmosphere, Georg-August Universität Göttingen, 2013.

Li Kun, Study on magnetospheric cold ion outflow, CAS Beijing, China, 2013.

Juan José Piqueras Meseguer, Design and optimization of a space camera with application to the PHI solar magnetograph, Technische Universität Braunschweig, 2013.

Tino Riethmüller, Investigations of small-scale magnetic features on the solar surface, Technische Universität Braunschweig, 2013.

Juan Andres Sánchez, Temperature-induced effects and phase reddening on near-Earth asteroids, Westfälische Wilhelms-Universität Münster, 2013.

Eugene Shalygin, Study of the Venus surface and lower atmosphere using VMC images, Technische Universität Braunschweig, 2013.

Tijmen van Wettum, The response of the corona to different spatial distributions of heat input, Georg-August-Universität Göttingen, 2013.

4. Vorträge und Poster / *Talks and posters*

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

(unterstrichen: Vortragende / *underline: presenter*)

- M. Andriopoulou, E. Roussos, N. Krupp**, C. Paranicas, M. Thomsen, S. Krimigis, M. Dougherty, and **K.-H. Glassmeier**, *A study of the Convective Electric Field in the Inner Magnetosphere of Saturn using Moon Microsignatures*, Magnetospheres of the Outer Planets Conference MOP 2013, Athens, Greece, July 8-12, 2013. (Oral)
- C. Anekallu, **S. Haaland**, J. Reistad, P. Tenfjord, L. Maes, J. deKeyser, and J. Gjerloev, *Characteristics of the flank magnetopause - contributions from the Cluster mission*, AGU Fall Meeting, San Francisco, USA, Dec 9-13, 2013. (Oral)
- A. Beth**, P. Garnier, D. Toubanc, I. Dandouras, C. Mazelle, and **A. Kotova**, *Modeling the satellite particles in planetary exospheres: application to Earth, Titan and Mars*, European Geosciences Union General Assembly, Vienna, Austria, Apr 8-12, 2013. (Oral)
- S. Bingert** and **H. Peter**, *Scale Invariant Coronal Heating by (Nano-)Flares*, Max-Planck Princeton Research Center on Plasma Physics - Conference, Garching, January 14-16, 2013. (Oral)
- N. Biver**, V. Debout, D. Bockelée-Morvan, J. Crovisier, P. Colom, R. Moreno, J. Boissier, G. Paubert, D. C. Lis, **P. Hartogh**, N. Dello-Russo, R. Vervack, and H. A. Weaver, *IRAM-30m Molecular Submm Surveys of Two Very Different Comets: C/2011 L4 (PanSTARRS) and C/2012 F6 (Lemmon)*, DPS meeting #45, Denver, CO, USA, October 6-11, 2013.
- H. Boehnhardt**, Pluto & Co: *Der Asteroidengürtel am Rande des Planetensystems*, Prolssi Science Talk series, Bern, Switzerland, March 20, 2013. (Oral)
- A. B. Bossmann, J. Wicht, T. Gastine**, and **U. R. Christensen**, *Numerical dynamo models for magnetic field generation in the ice giants*, International Symposium on Geophysical and Astrophysical Dynamics, Centro Stefano Franscini, Monte Verità, Ascona, Switzerland, July 07-12, 2013. (Poster)
- A. B. Bossmann, J. Wicht, T. Gastine**, and **U. R. Christensen**, *The exceptional magnetic fields of Uranus and Neptune: Possible generation mechanisms*, 17. Deutsche Physikerinnentagung, Heidelberg, Germany, October 31 - November 3, 2013. (Poster)
- P.-A. Bourdin**, *Large-scale data analysis and reproducibility in IDL*, Pencil Code User Meeting 2013, Lund, Sweden, June 17-20, 2013. (Oral)
- P.-A. Bourdin**, *Observationally driven 3D MHD model of the solar corona above a magnetically active region*, 2nd IWF Turbulence Workshop, Graz, Austria, September 30-October 4, 2013. (Oral)
- P.-A. Bourdin, S. Bingert**, and **H. Peter**, *3D MHD model of the solar corona above an active region driven by and compared to Hinode observations*, Department of Astronomy colloquium, Kyoto University, Kyoto, Japan, November 21, 2013. (Oral)
- P.-A. Bourdin, S. Bingert**, and **H. Peter**, *Coronal loops above an Active Region - observation versus model*, Hinode-7, Takayama, Japan, November 12-15, 2013. (Oral)
- P.-A. Bourdin, S. Bingert**, and **H. Peter**, *Coronal structure and dynamics above an Active Region MHD model versus observation*, LWS / SDO Science Workshop, Cambridge (MD), USA, March 3-8, 2013. (Oral)
- H. Breuillard**, O. Agapitov, A. Artemyev, V. Krasnoselskikh, Y. Zaliznyak, D. Boscher, S. Bourdarie, and **P. Daly**, *Chorus frequency distribution statistics in Earth's radiation belts from ray tracing*, Cluster 23rd Workshop, Tromsø, Norway, Sep 16-20, 2013. (Poster)
- R. Bučík, D. E. Innes**, **U. Mall**, **A. Korth**, and G. M. Mason, *Recurring ³He-rich solar energetic particle events*, 33rd International Cosmic Ray Conference, Rio de Janeiro, Brazil, July 2-9, 2013. (Oral)

- T. Cavalié**, H. Feuchtgruber, E. Lellouch, **M. de Val-Borro**, **C. Jarchow**, R. Moreno, **P. Hartogh**, G. Orton, T. K. Greathouse, F. Billebaud, M. Dobrijevic, L. M. Lara, A. Gonzalez, and H. Sagawa, *Spatial distribution of water in the stratosphere of Jupiter from observations with the Herschel space observatory*, European Planetary Science Congress 2013, London, UK, September 8-13, 2013.
- T. Cavalié**, E. Lellouch, **P. Hartogh**, R. Moreno, F. Billebaud, D. Bockelée-Morvan, N. Biver, T. Cassidy, R. Courtin, J. Crovisier, M. Dobrijevic, H. Feuchtgruber, A. Gonzalez, T. Greathouse, F. Helmich, **C. Jarchow**, M. Kidger, L. Lara, **M. Rengel**, G. Orton, H. Sagawa, and **M. de Val-Borro**, *The origin of external oxygen in Jupiter and Saturn's environments*, The Universe Explored by Herschel, ESA-ESTEC, Noordwijk, October 15-18, 2013. (Poster)
- T. Cavalié**, R. Moreno, E. Lellouch, **P. Hartogh**, O. Venot, G. S. Orton, **C. Jarchow**, T. Encrenaz, F. Selsis, F. Hersant, and L. N. Fletcher, *The origin of CO in the stratosphere of Uranus*, DPS meeting #45, Denver, CO, USA, October 6-11, 2013.
- F. Chen**, **H. Peter**, **S. Bingert**, **R. Cameron**, **M. Schüssler**, and M. M. C. Cheung, *A coupled model for the formation of active region corona*, Coronal loops workshop, La Roche-en-Ardenne, Belgium, Jun 24-28, 2013. (Oral)
- F. Chen**, **H. Peter**, **S. Bingert**, **R. Cameron**, **M. Schüssler**, and M. M. C. Cheung, *A coupled model for the formation of an active region corona*, 2013 LWS / SDO Science Workshop, Cambridge, MD, USA, March 3-8, 2013. (Oral)
- F. Chen**, **H. Peter**, **S. Bingert**, and M. C. M. Cheung, *A model for the formation of the active region corona driven by magnetic flux emergence*, The 2nd Asia Pacific Solar Physics Meeting, Hangzhou, China, October 24-26, 2013. (Oral)
- U. R. Christensen**, *Geodynamo modeling: Status and prospects*, International Symposium on Geophysical and Astrophysical Dynamos - Centro Stefano Franscini 2013, Ascona, Switzerland, July 8, 2013. (Oral)
- U. R. Christensen**, *Numerical Models of the Geodynamo*, 549. Wilhelm und Else Heraeus Seminar (Liquid Metal MHD), Bad Honnef, October 16, 2013. (Oral)
- H. Cottin**, L. Le Roy, G. Briani, A. Bardyn, C. Briois, N. Fray, L. Thirkell, C. Engrand, and **M. Hilchenbach**, *Measurements of the organic composition of cometary grains with the COSIMA TOF-SIMS instrument onboard the ROSETTA spacecraft*, American Geophysical Union, Fall Meeting, San Francisco, Dec 9-13, 2013. (Poster)
- H. Cottin**, L. Le Roy, G. Brianni, A. Bardyn, C. Briois, N. Fray, L. Thirkell, C. Engrand, and **M. Hilchenbach**, *The organic content of comets: how to get prepared for the COSIMA TOF-SIMS measurements onboard the ROSETTA spacecraft*, European Planetary Science Congress, London, UK, September 8-13, 2013. (Oral)
- V. Cottini**, N. Ignatiev, G. Piccioni, P. Drossart, and **W. J. Markiewicz**, *Water vapor near the cloud tops of Venus from VIRTIS Venus Express day side data*, International Venus Conference, Catania, Italy, June 10-14, 2013. (Poster)
- W. Curdt**, *Observation of small-scale vortex motion in the solar atmosphere, ISSI workshop "Solar coronal jets"*, International Space Science Institute (ISSI), Bern, Switzerland, March 4-8, 2013. (Oral)
- P. W. Daly**, *Status Report on the Cluster/RAPID Instrument*, 53rd Cluster Science Working Team Meeting, Tromso, Norway, Sep 17, 2013. (Oral)
- J. Deller**, S. C. Lowry, M. C. Price, **C. Snodgras**, and **H. Sierks**, *SPH simulations of impacts on rubble pile asteroids*, EPSC, London, Oct 8-12, 2013. (Oral)

- P. Drossart, **P. Hartogh**, K. Isaak, C. Lovis, G. Micela, M. Ollivier, I. Ribas, I. Snellen, B. Swinyard, G. Tinetti, L. Puig, M. Linder, E. E. S. Team, and E. E. S. Team, *The Exoplanet Characterisation Observatory (EChO) : an ESA mission to characterize exoplanets*, DPS meeting #45, Denver, CO, USA, October 6-11, 2013.
- E. Dubinin**, *Electrodynamics of the Venus ionosphere*, The Fourth Moscow Solar System Symposium (4M-S), Moscow, October 14-18, 2013.
- E. Dubinin**, *Ionospheric magnetic fields and currents on Venus*, International Venus Conference, Cataniy, Italy, June 10-14, 2013. (Oral)
- E. Dubinin**, **M. Fraenz**, **Y. Wei**, T.-L. Zhang, A. Fedorov, S. Barabash, and R. Lundin, *Magnetotails of Mars and Venus: Mars Express and Venus Express Observations*, AGU Chapman Conference, Fundamental Properties and Processes of Magnetotails, Reykjavik, Iceland, March 10-15, 2013. (Oral)
- E. Dubinin**, **M. Fraenz**, **J. Woch**, T. Zhang, **Y. Wei**, A. Fedorov, S. Barabash, and R. Lundin, *Plasma sheets in induced magnetospheres of Mars and Venus*, European Geosciences Union General Assembly, Vienna, Austria, Apr 8-12, 2013. (Oral)
- E. Dubinin**, **M. Fraenz**, T.-L. Zhang, **J. Woch**, **Y. Wei**, A. Fedorov, S. Barabash, and R. Lundin, *Distribution of plasma and magnetic field in the Venus induced magnetosphere is strongly asymmetrical*, European Planetary Science Congress, London, United Kingdom, September 08-13, 2013. (Oral)
- J. Duprat, B. Dachwald, **M. Hilchenbach**, C. Engrand, C. Espe, M. Feldmann, G. Francke, M. Görög, N. Lüsing, and F. Langenhorst, *The MARVIN Project: A Micrometeorite Harvester in Antarctic Snow*, 44th Lunar and Planetary Science Conference, Houston, US, March 18-22, 2013. (Poster)
- C. P. Escoubet, B. Grison, J. Berchem, K. J. Trattner, F. Pitout, R. Richard, M. G. G. T. Taylor, H. Laakso, A. Masson, M. Dunlop, I. Dandouras, Rème, A. N. Fazakerley, and **P. W. Daly**, *Cluster observations of ion dispersions near the exterior cusp*, Cluster 23rd Workshop, Tromso, Norway, Sep 16-20, 2013. (Poster)
- A. Feller**, **F. Iglesias**, and **N. Krishnappa**, *Fast Solar Polarimeter*, Solar Polarization Workshop 7, Kunming, China, September 9-13, 2013. (Oral)
- A. Fludra, D. Griffin, M. Caldwell, P. Eccleston, J. Cornaby, D. Drummond, W. Grainger, P. Greenway, T. Grundy, C. Howe, C. McQuirk, K. Middleton, O. Poyntz Wright, T. Richards, K. Rogers, C. Sawyer, B. Shaughnessy, S. Sidher, I. Tosh, S. Beardsley, G. Burton, A. Marshall, N. Waltham, S. Woodward, T. Appourchaux, A. Philippon, F. Auchere, E. Buchlin, A. Gabriel, J. C. Vial, **U. Schühle**, **W. Curdt**, **D. Innes**, **S. Meining**, **H. Peter**, **S. Solanki**, **L. Teriaca**, M. Gyo, M. Haberreiter, D. Pfiffner, W. Schmutz, M. Carlsson, S. V. Haugan, J. Davila, P. Jordan, W. Thompson, D. Hassler, B. Walls, C. Deforest, J. Hanley, J. Johnson, P. Phelan, L. Blecha, H. Cottard, G. Paciotti, N. Autissier, Y. Allemand, K. Relecom, G. Munro, A. Butler, R. Klein, and A. Gottwald, *SPICE EUV Spectrometer for the Solar Orbiter*, Solar Physics and Space Weather Instrumentation V, San Diego, August 25, 2013. (Oral)
- M. Foerster and **S. Haaland**, *High-latitude ionospheric convection from Cluster EDI revisited: Statistical results based on a full solar cycle of measurements*, Cluster 23rd workshop, Tromsø, Norway, 16-20 September, 2013. (Oral)
- A. García-Muñoz, R. Hueso, A. Sanchez-Lavega, **W. J. Markiewicz**, D. Titov, O. Witasse, and A. Opitz, *Global imaging of the Venus O2 visible nightglow with the Venus Monitoring Camera*, International Venus Conference, Catania, Italy, June 10-14, 2013. (Poster)
- L. Gizon**, *Helioseismology*, 10th Japanese-German Frontiers of Science Symposium, Kyoto, Japan, October 31 - November 3, 2013, invited talk. (Oral)
- L. Gizon**, *Imaging flows inside the Sun during the recent solar minimum*, AGU Chapman Conference: Causes and Consequences of the Extended Solar Minimum Between Solar Cycles 23 and 24 (4CESM), Key Largo, Florida, USA, April 8-12, 2013, invited. (Oral)

- L. Gizon**, *PLATO2.0*, KASC-6 Conference, Sydney, Australia, June 23-28, 2013, invited. (Oral)
- L. Gizon**, *Seismology of the Sun*, The 11th International Conference on Mathematical and Numerical Aspects of Waves (Waves 2013), Gammarth, Tunisia, June 3-7, 2013, plenary talk. (Oral)
- L. Gizon**, *Structure and dynamics of the Sun's interior*, ISSI Workshop on "Multi-scale structure formation and dynamics in cosmic plasmas", International Space Science Institute (ISSI), Berne, Switzerland, April 15-19, 2013, invited. (Oral)
- S. Haaland**, *On the supply of cold plasma to the Earth's magnetotail*, AGU Chapman Conference on Fundamental Properties and Processes of Magnetotails, Reykjavik, Iceland, March 10-15, 2013.
- S. Haaland** and J. Gjerloev, *Dawn-dusk asymmetries in magnetopause currents and ring current*, Cluster 23rd workshop, Tromsø, Norway, 16-20 September, 2013. (Oral)
- S. Haaland**, F. Mulligan, R. Hibbins, M. Foerster, C. M. Hall, N. Kleinknecht, and M. Tsutsumi, *On the Electromagnetic Forcing of Atmospheric Neutral Winds*, AGU Fall Meeting, San Francisco, USA, Dec 9-13, 2013. (Poster)
- P. Hartogh**, *The Submillimetre Wave Instrument (SWI) on JUICE*, International Colloquium and Workshop "Ganymede Lander: scientific goals and experiment", Space Research Institute (IKI), Moscow, Russia, March 4-8, 2013, invited. (Oral)
- P. Hartogh**, S. Barabash, G. Beaudin, **P. Börner**, D. Bockeleé-Morvan, **W. Boogaerts**, **T. Cavalié**, **U. R. Christensen**, **A. Dannenberg**, P. Eriksson, **M. Fränz**, T. Fouchet, U. Frisk, K. Hocke, C. Janssen, **C. Jarchow**, Y. Kasai, K. Kikuchi, J.-M. Krieg, **N. Krupp**, **T. Kuroda**, E. Lellouch, **A. Loose**, A. Maestrini, T. Manabe, **A. S. Medvedev**, J. Mendrok, **E. P. Miettinen**, R. Moreno, A. Murk, D. Murtagh, T. Nishibori, **M. Rengel**, **L. Rezac**, H. Sagawa, **E. Steinmetz**, B. Thomas, J. Urban, and **J. Wicht**, *The Submillimetre Wave Instrument on JUICE*, European Planetary Science Congress 2013, London, UK, September 8-13, 2013.
- P. Hartogh**, H. Sagawa, **M. Rengel**, **C. Jarchow**, and R. Güsten, *APEX Observations of Venus and Mars*, 10th Annual Meeting Asia Oceania Geosciences Society (AOGS), Brisbane, Australia, June 24-28, 2013. (Poster)
- M. Hilchenbach**, *Castalia - European Mission to a Main Belt Comet*, American Geophysical Union, Fall Meeting, San Francisco, Dec 9-13, 2013. (Poster)
- M. Hilchenbach**, C. Briois, H. Cottin, C. Engrand, K. Hornung, J. Kissel, **H. Krüger**, H. J. Lehto, K. Lehto, J. Silen, L. Thirkell, and K. Varmuza, *Laboratory Secondary Ion Mass Spectra of Cometary Analog Material*, 44th Lunar and Planetary Science Conference, Houston, US, March 18-22, 2013. (Poster)
- M. Hilchenbach**, **H. Fischer**, **H. Krüger**, L. Thirkell, and J. Rynö, *Compounds identified in-flight by ROSETTA-COSIMA before the comet encounter*, European Planetary Science Congress, London, UK, September 8-13, 2013. (Oral)
- M. Hilchenbach**, B. Gniewosz, N. Tarcea, K. Lehto, and H. J. Lehto, *Iron Meteorite Fragment Characterized with Raman Spectroscopy as Extraterrestrial Analog Matter for Rosetta COSIMA*, 76th Annual Meeting of the Meteoritical Society, Edmonton, Canada, July 29-August 7, 2013. (Poster)
- M. Hilchenbach**, A. Remizov, and H.-U. Auster, *Envisaged in-situ plasma observations on comet 67P/Churyumov-Gerasimenko*, EGU General Assembly, Vienna, Austria, April 7-12, 2013. (Oral)
- M. Hofmann**, **H. Sierks**, and J. Blum, *Small scale impacts as trigger for an avalanche in a low gravity environment*, European Planetary Science Congress EPSC 2013, University College London, UK, September 8-13, 2013. (Oral)
- E. Howell, M. Busch, **V. Reddy**, R. Vervack, M. Nolan, C. Magri, Y. Fernandez, P. Taylor, A. Springmann, **J. Sanchez**, D. Scheeres, and Y. Takahashi, *Using a Radar Shape Model to Interpret Spectral Observations of near-Earth Asteroid 4179 Toutatis*, Division for Planetary Sciences, Denver, Colorado, USA, October 6-11, 2013. (Oral)

- N. Ignatiev, G. Piccionz, P. Drossart, D. Titov, and **W. J. Markiewicz**, *Cloud top variations from Venus Express measurements*, International Venus Conference, Catania, Italy, June 10-14, 2013. (Oral)
- D. Innes**, *Observations of quiet-Sun transition region and coronal transients*, University of Sheffield, School of Mathematics and Statistics, Sheffield, February 15, 2013, invited. (Oral)
- D. Innes**, *Solar observations of magnetic reconnection*, Max-Planck Princeton Research Center on Plasma Physics- Workshop, Garching, January 14-16, 2013. (Oral)
- S. L. Jinks, E. J. Bunce, P. G., T. K. Yeoman, S. W. H. Cowley, C. S. Arridge, **N. Krupp**, W. S. Kurth, D. G. Mitchell, J. E. Wahlund, M. Morooka, and M. K. Dougherty, *Cassini multi-instrument assessment of the open-closed field line boundary of Saturn's magnetosphere*, European Planetary Science Congress EPSC 2013, University College London, UK, September 8-13, 2013.
- A. Kotova**, **N. Krupp**, **E. Roussos**, and I. Dandouras, *Modeling of the energetic ion observations in the vicinity of Rhea and Dione: final results*, MIMI Team Meeting, Athens, Greece, July 6, 2013.
- A. Kotova**, **N. Krupp**, **E. Roussos**, and I. Dandouras, *Modeling of the MIMI/LEMMS energetic ion observations in the vicinity of Rhea and Dione*, Cassini MAPS Workshop, San-Antonio, TX, USA, March 20, 2013. (Oral).
- A. Kotova**, **N. Krupp**, **E. Roussos**, and I. Dandouras, *Simulation of the Galactic Cosmic Rays interaction with Saturns atmosphere and rings*, Magnetospheres of the Outer Planets (MOP 2013), Athens, Greece, July 9, 2013. (Oral)
- A. Kotova**, **N. Krupp**, **E. Roussos**, I. Dandouras, and K. Khurana, *Modeling of the energetic ion observations in the vicinity of Rhea and Dione*, European Geosciences Union General Assembly, Vienna, Austria, Apr 8-12, 2013. (Oral)
- A. Kotova**, **E. Roussos**, **N. Krupp**, and I. Dandouras, *Studying the Saturn inner radiation belt*, European Planetary Science Congress EPSC 2013, University College London, UK, September 8-13, 2013. (Oral)
- A. Kotova**, **E. Roussos**, **N. Krupp**, and I. Dandouras, *Energetic charged particle populations of the magnetospheres of the outer planets*, ISSI workshop "Plasma sources for Solar System Magnetospheres", Bern, Switzerland, September 23, 2013. (Oral)
- N. Krivova**, *The future Sun: dimmer or brighter?*, TOSCA science and management committee meetings, Prague, September 9 - October 4, 2013, invited. (Oral)
- E. Kronberg**, E. Grigorenko, **S. Haaland**, **P. W. Daly**, L. Kistler, and I. Dandouras, *Acceleration and loss of oxygen ions in the terrestrial magnetosphere*, EGU, Vienna, April 8-12, 2013. (Poster)
- E. Kronberg**, **S. Haaland**, E. Grigorenko, **P. W. Daly**, K. Li, L. Kistler, and I. Dandouras, *On Response of the Plasma Sheet Ions to Changes in Solar Wind*, AOGS, Brisbane, Australia, June, 24-28, 2013, invited. (Oral)
- E. Kronberg**, **S. Haaland**, E. Grigorenko, **P. W. Daly**, and H. Luo, *Transport of Oxygen Ions under Different Solar Wind Conditions*, Cluster 23rd workshop, Tromso, September 16-20, 2013. (Oral)
- E. Kronberg** and S. Kasahara, *Reconnection at Jupiter and Earth*, AOGS, Brisbane, Australia, June, 24-28, 2013, invited. (Oral)
- H. Krüger**, *Cosmic Dust - From Ulysses to Rosetta*, Chiba Institute of Technology,, Niragata/Japan, July 31, 2013. (Oral)
- H. Krüger**, *Die Sonne - Stern des Lebens*, Volkshochschule Mosbach/Baden, Binau, Nov. 29, 2013. (Oral)
- H. Krüger**, *Kometen - Boten aus der Frühzeit des Sonnensystems*, Förderkreis Planetarium Göttingen, Göttingen, November 26, 2013. (Oral)

- H. Krüger**, *Raumsonde Rosetta - Verabredung mit einem Kometen*, Planetarium Stuttgart, May 16, 2013, invited. (Oral)
- H. Krüger**, *Raumsonde Rosetta - Verabredung mit einem Kometen*, Regener-Vortrag, MPS, Katlenburg-Lindau, June 18, 2013. (Oral)
- H. Krüger**, *Rosetta Cometary Secondary Ion Mass Analyser, Cosima*, Seminarios del departamento de ciencias especiales, Universidad Nacional Autonoma de Mexico, Instituto de Geofisica, Mexico, October 10, 2013.
- H. Krüger**, *Rosetta: Mission to land on a comet*, Seminarios de Geofisica, Universidad Nacional Autonoma de Mexico, Instituto de Geofisica, Mexico, October 08, 2013.
- H. Krüger**, *Weltraummüll - Eine Gefahr für die Raumfahrt?*, Volkshochschule Binau, Binau (Mosbach/Baden), March 22, 2013. (Oral)
- H. Krüger**, A. Flandes, A. Hirn, **A. Loose**, K. J. Seidensticker, M. Sperl, H.-H. Fischer, and W. Arnold, *Dust Impact Monitor DIM Onboard Rosetta/Philae - Comparison of Experimental Results and the Theory Behind the Experiment*, Dusty Visions 2013, Stuttgart/Germany, July 17-19, 2013. (Oral)
- H. Krüger**, A. Flandes, A. Hirn, **A. Loose**, K. J. Seidensticker, M. Sperl, H.-H. Fischer, and W. Arnold, *Dust Impact Monitor DIM Onboard the Rosetta Lander Philae - Comparison of Experimental Results and the Theory Behind the Instrument*, Cosmic Dust 2013, Kobe/Japan, August 05-09, 2013. (Poster)
- N. Krupp**, *Comparative energetic particle environments in the solar system*, Heliophysics Summer School, Boulder, CO, USA, July 12-19, 2013, invited lecture. (Oral)
- N. Krupp**, *Global configuration and dynamics of outer planets magnetospheres*, Workshop on: Plasma Sources for Solar System Magnetospheres, ISSI, Bern, Switzerland, Sep 23-27, 2013. (Oral)
- N. Krupp**, *Jupiter's magnetosphere - A plasma laboratory of superlatives and extremes*, Seminar at Physics Institute, University of Bern, 23 Oct, 2013. (Oral)
- N. Krupp**, *Particle Measurements in the vicinity of Enceladus, Dione, and Rhea: Cassini MIMI/LEMMS results*, Planetenseminar, Max-Planck-Institut für Sonnensystemforschung, Katlenburg-Lindau, 12 Nov, 2013. (Oral)
- N. Krupp**, S. Barabash, P. Brandt, and the JUICE-PEP Team, *Charged and Neutral Particle Measurements in the Jovian Magnetosphere: Science Goals for JUICE*, Magnetospheres of the Outer planets Conference MOP 2013, Athens, Greece, July 8-12, 2013. (Oral)
- N. Krupp**, **E. Kronberg**, D. G. Mitchell, M. Vogt, K. Khurana, A. Rymer, C. Jackman, A. Radioti, and X. Jia, *Energetic particles in the magnetotails of Jupiter and Saturn: A comparison using Galileo/EPD and Cassini/MIMI data*, AGU Chapman conference on Fundamental Properties and Processes of Magnetotails, Reykjavik, Iceland, 10-15 March, 2013. (Oral)
- N. Krupp**, **E. Roussos**, D. Mitchell, P. Kollmann, C. Paranicas, N. Sergis, and C. Jackman, *The magnetotails of Jupiter and Saturn: Comparison of charged (and neutral) particle measurements*, European Planetary Science Congress EPSC 2013, University College London, UK, September 8-13, 2013.
- T. Kuroda**, **A. S. Medvedev**, and **P. Hartogh**, *Radiative heat balances in Jupiters stratosphere*, 10th Annual Meeting of the Asia Oceania Geosciences Society (AOGS), Brisbane, Australia, June 24-28, 2013. (Oral)
- T. Kuroda**, **A. S. Medvedev**, Y. Kasaba, and **P. Hartogh**, *CO₂ Snowfalls and Baroclinic Waves in the Northern Winter Polar Atmosphere of Mars*, European Planetary Science Congress 2013, London, UK, September 8-13, 2013.
- T. Kuroda**, **A. S. Medvedev**, Y. Kasaba, and **P. Hartogh**, *Interactions between CO₂ snowfalls and baroclinic waves in the winter polar atmosphere of Mars*, 10th Annual Meeting of the Asia Oceania Geosciences Society (AOGS), Brisbane, Australia, June 24-28, 2013. (Oral)

- T. Kuroda, A. S. Medvedev**, Y. Kasaba, and **P. Hartogh**, *Simulated CO₂ Snowfalls and Baroclinic Waves in the Northern Winter Polar Atmosphere on Mars: Feasibility of Forecasts*, American Geophysical Union, Fall Meeting 2013, San Francisco, CA, USA, December 9-13, 2013.
- A. Lagg**, *Solar Orbiter and stereoscopic magnetometry*, 1st Solarnet Meeting "Synergies between ground and space based solar research", Oslo, Norway, Aug 5-8, 2013. (Oral)
- A. Lagg, S. K. Solanki**, and **M. van Noort**, *A Granular Light Bridge Observed by Hinode: Evidence for Naked Granules*, Hinode 7, Takayama, Japan, Nov 10-15, 2013. (Oral)
- J. Langfellner, L. Gizon, A. Birch**, and **H. Schunker**, *Probing vortical motions in the Sun with time-distance helioseismology*, 2013 LWS Solar Dynamics Observatory Science Workshop, Cambridge, Maryland, USA, March 03-08, 2013. (Oral)
- M. Lester**, H. Opgenoorth, D. Andrews, **E. Dubinin**, N. Edberg, **M. Fraenz**, T. Howard, W. Kofman, L. Lei, R. Lillis, M. Matta, D. Morgan, H. Nilsson, A. Opitz, K. Peter, K. J. Wild, P. Withers, and O. Witasse, *Electron "holes" and crustal magnetic fields at Mars*, European Geosciences Union General Assembly, Vienna, Austria, Apr 8-12, 2013. (Oral)
- K. Li, S. Haaland**, A. Eriksson, M. André, E. Engwall, **Y. Wei, E. A. Kronberg, M. Fraenz, P. W. Daly**, H. Zhao, and Q. Ren, *Transport of cold ions from the polar ionosphere to the plasma sheet*, Cluster 23rd Workshop, Tromso, Norway, Sep 16-20, 2013. (Oral)
- K. Li, S. Haaland**, A. Eriksson, M. Andre, E. Engwall, **Y. Wei, E. A. Kronberg, M. Fraenz, P. W. Daly**, H. Zhao, and Q. Ren, *Transport of cold ions from the polar ionosphere to the plasma sheet*, Cluster 23rd workshop, Tromsø, Norway, 16-20 September, 2013. (Oral)
- S. Limaye**, R. Clancy, **M. Rengel**, M. Sorning, and **P. Hartogh**, *Towards a Better Understanding of the Venus Atmosphere Observations needed between 65 120 km*, AGU Fall Meeting, San Francisco, USA, Dec 9-13, 2013. (Poster)
- S. Limaye** and **W. J. Markiewicz**, *Global Vortex Circulation on Venus - an assessment from Venus Express Observations*, International Venus Conference, Catania, Italy, June 10-14, 2013. (Oral)
- R. Lundin**, S. Barabash, H. Nilsson, M. Yamauchi, and **E. Dubinin**, *Mars Ion Outflow and Escape - Solar Cycle Dependence*, European Geosciences Union General Assembly, Vienna, Austria, Apr 8-12, 2013. (Oral)
- H. Luo, E. Kronberg**, E. Grigorenko, and **P. W. Daly**, *On the motion of energetic ions in the near-Earth plasma sheet: Cluster/RAPID observations*, European Geosciences Union General Assembly, Vienna, Austria, April, 8-12, 2013. (Poster)
- H. Luo, **E. Kronberg**, E. Grigorenko, **M. Fränz, P. W. Daly**, and **Y. Wei**, *Evidence of strong energetic ion acceleration in the near-Earth magnetotail*, Cluster 23rd workshop, Tromso, September 16-20, 2013. (Oral)
- W. J. Markiewicz** and the VMC Team, *Morphology, dynamics and physical properties of the Venus upper clouds from imaging with Venus Monitoring Camera on Venus Express*, Invited CESPAS seminar, The Open University, UK, March 7, 2013. (Oral)
- W. J. Markiewicz**, D. Titov, E. Petrova, N. Ignatiev, I. Khatuntsev, S. S. Limaye, **O. Shalygina**, and M. Almeida, *Morphology, dynamics and physical properties of the Venus upper clouds from imaging with Venus Monitoring Camera on Venus Express*, International Symposium on Planetary Sciences (IAPS), Shanghai, China, July 1-4 2013, 2013, invited. (Oral)
- A. S. Medvedev**, *Mars atmosphere studies with a Mars general circulation model*, Nagoya University Program for Leading Graduate Schools: Space Exploration and Research, Nagoya University, Japan, November 27, 2013, invited lecture. (Oral)

- A. S. Medvedev**, **J. Sethunadh**, and **P. Hartogh**, *From cold to warm gas giants: a three-dimensional atmospheric general circulation modeling*, EChO Open Science Workshop, ESTEX, Noordwijk, The Netherlands, July, 1-3, 2013. (Oral)
- A. S. Medvedev**, **J. Sethunadh**, and **P. Hartogh**, *General circulation of stratospheres of giant gas planets, and constraints for future microwave observations*, 10th Annual Meeting of the Asia Oceania Geosciences Society (AOGS), Brisbane, Australia, June 24-28, 2013. (Oral)
- A. S. Medvedev**, E. Yigit, and **P. Hartogh**, *Vertical coupling by gravity waves in the Martian atmosphere*, 10th Annual Meeting of the Asia Oceania Geosciences Society (AOGS), Brisbane, Australia, June 24-28, 2013. (Oral)
- R. Modolo**, **E. Dubinin**, J.-J. Berthelier, N. Romanelli, C. Bertucci, A. Coates, N. Edberg, and J.-E. Wahlund, *Outflow and plasma acceleration in Titan's induced magnetotail*, European Planetary Science Congress, London, United Kingdom, September 08-13, 2013. (Oral)
- T. Müller**, E. Vilenius, C. Kiss, P. Santos-Sanz, M. Mommert, S. Fornasier, R. Duffart, E. Lellouch, J. Stansberry, A. Pal, and **M. Rengel**, *Studies of Trans-Neptunian objects with Herschel*, European Planetary Science Congress (EPSC) 2013, London, United Kingdom, September 8-13, 2013. (Poster)
- P. A. Muñoz**, K.-W. Lee, and **J. Büchner**, *Effects of a guide field on the stability and non-linear evolution of a Harris current sheet*, 11th International School/Symposium for Space Simulations (ISSS-11), National Central University (NCU), Jhongli City, Taiwan, July 21-28, 2013. (Poster)
- H. Sierks**, **N. Oklay** and **J.-B. Vincent**, *SFilter strategy for the characterization of minerals with OSIRIS*, LPSC, The Woodlands, Texas, The USA, 18-22 March, 2013. (Poster)
- K. Nagashima**, **L. Gizon**, **A. Birch**, **B. Löptien**, S. Couvidat, B. Fleck, and R. Stein, *Extracting multi-height velocity information from SDO/HMI Dopplergrams*, LWS/SDO 2013 Science Workshop "Exploring the Network of SDO Science", Cambridge, MD, USA, March 3-8, 2013, contributed talk. (Oral)
- K. Nagashima**, **L. Gizon**, **A. Birch**, **B. Löptien**, S. Couvidat, B. Fleck, and R. Stein, *Multi-height velocity measurements using SDO/HMI observation datasets*, Astronomical Society of Japan autumn meeting, Tohoku University, Sendai, Japan, September 11, 2013. (Oral)
- N. Oklay**, **J.-B. Vincent**, and **H. Sierks**, *Spectral methods to detect cometary minerals with OSIRIS on board Rosetta*, EPSC, London, 8-13 September, 2013. (Poster)
- L. O'Rourke**, **C. Snodgrass**, **M. de Val-Borro**, N. Biver, D. Bockelee-Morvan, H. Hsieh, D. Teyssier, M. Micheli, **P. Hartogh**, Y. Fernandez, and M. Kueppers, *Herschel/HIFI determination of an upper limit for the water outgassing rate of active main-belt comet P/2012 T1 (PANSTARRS)*, European Planetary Science Congress 2013, London, UK, December 8-13, 2013
- G. S. Orton**, L. N. Fletcher, H. Feuchtgruber, E. Lellouch, R. Moreno, T. Encrenaz, **P. Hartogh**, **C. Jarchow**, B. Swinyard, J. I. Moses, M. J. Burgdorf, H. B. Hammel, M. R. Line, G. Sandell, and C. D. Dowell, *Models for Temperature and Composition in Uranus from Spitzer, Herschel and Ground-Based Infrared through Millimeter Observations*, American Geophysical Union, Fall Meeting 2013, San Francisco, CA, USA, December 9-13, 2013.
- J. Park**, **D. Innes**, **R. Bucik**, and Y.-J. Moon, *A study of the relationship between solar energetic particles and EUV waves*, AGU Fall Meeting, San Francisco, USA, Dec 9-13, 2013. (Poster)
- J. Park**, **D. Innes**, **R. Bucik**, and Y.-J. Moon, *The source regions of solar energetic particles detected by widely separated spacecraft*, AAS/SPD annual meeting, Bozeman, Montana, USA, July 8-11, 2013. (Poster)
- J. Park**, **D. Innes**, **R. Bucik**, Y.-J. Moon, and G. Mason, *The source regions of solar energetic particles detected by widely separated spacecraft*, AOGS 10th Annual Meeting, Brisbane, Australia, June 24-28, 2013. (Poster)

- E. Petrova, O. Shalygina, and W. J. Markiewicz**, *Physical properties of particles in the upper clouds of Venus from the IR and UV images taken by VMC/VEx at small phase angles*, International Venus Conference, Catania, Italy, June 10-14, 2013. (Oral)
- V. Reddy, E. Cloutis, M. Cuddy, W. Bottke, J. Sanchez, P. Mann, M. Izawa, G. Fujihara, M. Gaffey, and L. Le Corre**, *Composition of Chelyabinsk Meteorite: Identifying its Parent Body in the Main Belt*, Division for Planetary Sciences, Denver, Colorado, USA, Oct 6-11, 2013. (Oral)
- V. Reddy, J. A. Sanchez, W. F. Bottke, M. J. Gaffey, L. Le Corre, J. Masiero, and A. K. Mainzer**, *Composition of (1696) Nurmela: The Second Largest Member of Baptistina Asteroid Family*, 44th Lunar and Planetary Science Conference, The Woodlands, Texas, USA, March 18-22, 2013. (Poster)
- M. Rengel**, *Tracing the gas composition of Titan's atmosphere with Herschel: Advances and Discoveries*, Planetenseminar, Max-Planck-Institut für Sonnensystemforschung, Katlenburg-Lindau, Dec 12, 2013. (Oral)
- M. Rengel, P. Hartogh, H. Sagawa, C. Jarchow, and R. Güsten**, *Tracing the CO composition and winds in Venus's atmosphere at the submillimetre wavelengths: Advances*, International Symposium on Planetary Sciences (IAPS), Shanghai, China, July 1-4, 2013, invited. (Oral)
- M. Rengel, R. Moreno, R. Courtin, E. Lellouch, H. Sagawa, P. Hartogh, B. Swinyard, L. Lara, H. Feuchtgruber, C. Jarchow, T. Fulton, J. Cernicharo, D. Bockeleé-Morvan, N. Biver, M. Banaszkiwicz, and A. González**, *The composition of the atmosphere of Titan as seen by Herschel: Highlights*, Astronomische Gesellschaft Annual Meeting, Tübingen, September 24-27, 2013. (Oral)
- M. Rengel, R. Moreno, R. Courtin, E. Lellouch, H. Sagawa, P. Hartogh, B. Swinyard, L. Lara, H. Feuchtgruber, C. Jarchow, T. Fulton, J. Cernicharo, D. Bockeleé-Morvan, N. Biver, M. Banaszkiwicz, and A. González**, *Tracing the Gas Composition of Titan's Atmosphere with Herschel Advances and Discoveries, The Universe Explored by Herschel*, ESA/ESTEC, Noordwijk, October 15-18, 2013, plenary Talk. (Oral)
- M. Rengel, H. Sagawa, P. Hartogh, E. Lellouch, H. Feuchtgruber, R. Moreno, C. Jarchow, J. Cernicharo, and L. Lara**, *Exploring the Titan's stratosphere with Herschel/PACS: the composition of CH₄, CO, HCN, and H₂O*, 10th Annual Meeting of the Asia Oceania Geosciences Society (AOGS) 2013, Brisbane, Australia, June 24-28, 2013. (Oral)
- E. Roussos**, *Saturn's radiation belts in the view of Cassinis MIMI/LEMMS observations*, European Geosciences Union General Assembly, Vienna, Austria, Apr 8-12, 2013. (Oral)
- E. Roussos, N. Krupp, and C. Paranicas**, *MeV electrons in Saturn's high-latitude, cusp region*, European Planetary Science Congress EPSC 2013, University College London, UK, September 8-13, 2013.
- E. Roussos, N. Krupp, and C. Paranicas**, *MeV electrons near Saturn's magnetospheric cusp*, Magnetospheres of the Outer Planets Conference MOP 2013, Athens, Greece, July 8-12, 2013, Athens, Greece, July 8-12, 2013. (Poster)
- H. Sagawa, P. Hartogh, M. Rengel, and R. Güsten**, *Submillimetre observations of Venus atmosphere using FLASH and CHAMP+ instruments on APEX*, European Planetary Science Congress (EPSC) 2013, London, United Kingdom, September 8-13, 2013. (Poster)
- K. Schindler**, *Einsatz eines Shack-Hartmann-Sensors zur Beurteilung von Justage- und Abbildungsfehlern*, DSI Offsite Meeting, Palmdale, California, November 19-20, 2013. (Oral)
- K. Schindler**, *Inbetriebnahme und Systemkonzept des 60 cm Teleskops am Sierra Remote Observatory*, DSI Offsite Meeting, Palmdale, California, November 19-20, 2013. (Oral)
- K. Schindler and V. Reddy**, *Near-Infrared Spectroscopy of Irregular Jovian Satellites*, Second SOFIA Staff Science Symposium, Morgan Hill, California, November 14-15, 2013. (Oral)

- D. Schmit**, *Solar Prominences and Magnetic Flux Ropes*, First Meeting of the Princeton-Max Planck Center for Plasma Physics, Garching, January 14-16, 2013. (Oral)
- U. Schühle**, *Design and Space Qualification of a Telescope Mirror for Solar Observations*, 273. PTB Seminar: VUV and EUV Metrology, HZB/BESSY II Berlin, October 24-25, 2013. (Oral)
- M. Schüssler**, *Dynamics of magnetic fields in the convection zone (invited), The solar activity cycle: physical causes and consequences*, ISSI Bern, November 11-15, 2013. (Oral)
- M. Schüssler**, *Good scientific practice: ethical issues in the research environment*, Retreat of Graduiertenkolleg "Planets and their host stars", Salzgitter, November 5-6, 2013. (Oral)
- N. Sergis**, C. M. Jackman, C. S. Arridge, S. M. Krimigis, D. C. Hamilton, D. G. Mitchell, **N. Krupp**, and M. K. Dougherty, *Chasing the center of the Saturnian plasma sheet*, European Planetary Science Congress EPSC 2013, University College London, UK, September 8-13, 2013.
- E. Shalygin**, A. Basilevsky, **W. J. Markiewicz**, and D. Titov, *Venus surface geology from near infrared night side Venus Monitoring Camera images*, International Venus Conference, Catania, Italy, June 10-14, 2013. (Poster)
- A. Sieck**, R. Wollrab, H. Bitterlich, M. Benecke, J. Ziegler, **B. Dabrowski**, **R. Orlik**, and **U. Mall**, *HgCdTe-detectors for the VIS-SWIR spectral range*, Freiburg Infrared Colloquium 2013, Freiburg, March 26-27, 2013. (Oral)
- S. K. Solanki**, *Dynamic Chromosphere and Quiet Sun*, Solar AMLMA Workshop, Glasgow, UK, January 14-17, 2013. (Oral)
- S. K. Solanki**, *Solar irradiance variability*, Spring Meeting of the German Physical Society, Jena, Germany, February 25-March 01, 2013. (Oral)
- S. K. Solanki**, *Attracting and keeping excellent scientists the Max Planck way*, Colloquium, Korea Advanced Institute of Science & Technology (KAIST), Daejeon, Korea, April 8, 2013. (Oral)
- S. K. Solanki**, *The Sun's magnetic field and activity*, Colloquium, Seoul National University, Seoul, Korea, April 18, 2013. (Oral)
- S. K. Solanki**, *Solar Spectral Irradiance Variability*, 5th International Symposium on Space Climate: Under the Midnight Sun, Oulu, Finland, June 15-19, 2013. (Oral)
- S. K. Solanki**, *Space Science in Germany*, Institute of Space and Astronautical Science ISAS, Sagamihara, Kanagawa, Japan, August 12, 2013. (Oral)
- S. K. Solanki**, *The Solar Influence on our Terrestrial Environment*, Space Science Training Week.: Data Driven Modeling and Forecasting, Leuven, Belgium, September 18-19, 2013. (Oral)
- S. K. Solanki**, *Scientific Objectives and Current Status of Solar Orbiter*, 2nd Asian-Pacific Solar Physics Meeting, Hangzhou, China, October 24-26, 2013. (Oral)
- S. K. Solanki**, *The Schwabe and Hale solar activity cycles*, ISSI Workshop: The Solar Activity Cycle: Physical Causes and Consequences, Bern, Switzerland, March 26-27, 2013. (Oral)
- S. Szutowicz**, N. Biver, D. Bockelée-Morvan, J. Crovisier, **M. de Val-Borro**, **P. Hartogh**, R. Moreno, **M. Rengel**, D. Lis, M. Küppers, and the HsO Team, *Comet 10P/Tempel 2 outgassing observed with Herschel Space Observatory*, The Universe Explored by Herschel, ESA-ESTEC, Noordwijk, October 15-18, 2013. (Poster)
- L. Teriaca**, *The plume vs interplume dilemma, Atomic physics, plasma spectroscopy, and solar physics from space: Celebrating the achievements of Alan Gabriel*, Orsay, Paris, France, June 20, 2013. (Oral)
- L. Teriaca**, G. A. Doschek, L. K. Harra, C. Korendyke, **U. Schühle**, T. Shimizu, and the LEMUR/EUVST team, *LEMUR/EUVST: the high spatial and temporal resolution spectrograph for the Solar C mission*, Sixth Coronal Loops Workshop, La Roche en Ardenne, Belgium, June 25-27, 2013. (Oral)

- L. Teriaca** and the LEMUR/EUVST Team, *Solar-C and the LEMUR/EUVST spectrograph*, 3rd METIS Science and Technical Meeting, Napoli, Italy, October 15-17, 2013. (Oral)
- J. K. Thalmann**, *How does the spatial resolution effect the methods?*, NLFFF Consortium Meeting 6, International Space Science Institute, Bern, Switzerland, Jan 27 - Feb 1, 2013. (Oral)
- J. K. Thalmann**, **S. K. Tiwari**, and **T. Wiegelmann**, *Force-free coronal magnetic field modeling using vector fields from Hinode and SDO*, European Geosciences Union General Assembly, Vienna, Austria, Apr 8-12, 2013. (Poster)
- G. Tinetti**, **P. Drossart**, **P. Hartogh**, **K. Isaak**, **M. Linder**, **C. Lovis**, **G. Micela**, **L. Puig**, **M. Ollivier**, **I. Ribas**, **I. Snellen**, and **B. Swinyard**, *The science of EChO - Exoplanet Characterisation Observatory*, European Planetary Science Congress 2013, London, UK, September 8-13, 2013.
- S. K. Tiwari**, **M. van Noort**, **A. Lagg**, and **S. K. Solanki**, *Structure of sunspot penumbral filaments*, Synergies between ground and space based solar research 1st SOLARNET - 3rd EAST/ATST meeting, Oslo, August 05-08, 2013. (Oral)
- V. M. Vasyliūnas**, *Angular momentum transfer and rotational effects in planetary magnetotails and polar caps*, European Geosciences Union General Assembly, Vienna, Austria, Apr 8-12, 2013. (Oral)
- V. M. Vasyliūnas**, *Angular momentum transfer in the polar cap of Saturn and its relation (if any) to magnetospheric periodicities*, Space physics seminar, Rice University, Houston, Texas, USA, March 18, 2013. (Oral)
- V. M. Vasyliūnas**, *Angular momentum transfer in the polar cap of Saturn and its relation (if any) to magnetospheric periodicities*, Cassini MAPS workshop 2013, San Antonio, Texas, USA, March 20-22, 2013. (Oral)
- V. M. Vasyliūnas**, *Momentum flow in the magnetosphere/ionosphere/atmosphere/Earth system*, Seminar, Instituto Nacional de Pesquisas Espaciais, São José dos Campos, Brazil, October 21, 2013. (Oral)
- V. M. Vasyliūnas**, *Momentum flow in the magnetosphere/ionosphere/atmosphere/Earth system, Mechanics of the Magnetospheric System and Effects on the Polar Region*, Torres del Paine, Patagonia, Chile, October 27 - November 1, 2013, invited. (Oral)
- V. M. Vasyliūnas**, *Neutral wind dynamo processes in the terrestrial ionosphere and in the solar chromosphere*, Seminar, Instituto Nacional de Pesquisas Espaciais, São José dos Campos, Brazil, October 23, 2013. (Oral)
- V. M. Vasyliūnas**, *Plasma flow and formation of planetary magnetotails*, Magnetospheres of the Outer Planets Conference (MOP 2013), Athens, Greece, July 8-12, 2013. (Oral)
- V. M. Vasyliūnas**, *The magnetotail: An unsolved fundamental problem of magnetospheric physics*, AGU Chapman Conference on Fundamental Properties and Processes of Magnetotails, Reykjavik, Iceland, March 10-15, 2013, invited tutorial. (Oral)
- V. M. Vasyliūnas** and **P. Song**, *Chromospheric circulation driven by horizontally inhomogeneous heating*, AGU Fall Meeting, San Francisco, California, USA, Dec 9-13, 2013. (Poster)
- J.-B. Vincent**, **L. M. Lara**, **G. P. Tozzi**, **Z.-Y. Lin**, and **H. Sierks**, *Seasonal variation of activity on the nucleus of comet 67P/Churyumov-Gerasimenko*, EPSC 2013, London, September 8-13, 2013, invited talk. (Oral)
- J.-B. Vincent**, **H. Sierks**, and **M. Rose**, *Jet activity on the cliffs of comet 9P/Tempel 1*, EPSC 2013, London, September 8-13, 2013. (Oral)
- J.-B. Vincent** and the OSIRIS/Rosetta and Dawn/FC teams, *Surviving a catastrophic disruption: Insights from (2867)Steins, (21)Lutetia, and (4)Vesta*, 8th Catastrophic Disruption Workshop, Hawaii, Big Island, June 24-27, 2013, invited talk. (Oral)

T. Wiegmann, S. Solanki, J. Borrero, **H. Peter**, and the Sunrise Team, *Evolution of the Fine Structure of Magnetic Fields in the Quiet Sun: Observations from Sunrise/IMaX and Extrapolations*, European Geosciences Union General Assembly, Vienna, Austria, Apr 8-12, 2013 (Oral and Poster)

T. Wiegmann, S. K. Solanki, J. M. Borrero, **H. Peter**, and the Sunrise team, *Can magnetic reconnection in the quiet Sun heat the chromospheric and coronal plasma?*, DPG-Frühjahrstagung, Jena, Feb 25 - March 1, 2013. (Oral)

K. Wilhelm, *Do we understand polar coronal plumes of the Sun?*, *Atomic physics, plasma spectroscopy, and solar physics from space: Celebrating the achievements of Alan Gabriel*, Institut d'Astrophysique Spatiale (IAS), CNRS-Université Paris-Sud, Orsay, France, June 20, 2013. (Oral)

P. Withers, M. Matta, M. Lester, D. Andrews, N. Edberg, H. Nilsson, H. Opgenoorth, **E. Dubinin**, **M. Fraenz**, T. Howard, W. Kofman, L. Lei, R. Lillis, D. Morgan, M. Paetzold, K. Peter, A. Opitz, O. Witasse, and J. Wild, *Variability observed in the topside ionosphere of Mars during a multi-instrument campaign in March and April 2010*, European Geosciences Union General Assembly, Vienna, Austria, Apr 8-12, 2013. (Poster)

R. Yadav, *Bridging planets and stars in dynamo models*, Magnetic fields throughout stellar evolution (IAUS 302), Biarritz, France, Aug 25-30, 2013. (Poster)

R. Yadav, *Bridging planets and stars in dynamo models: scaling laws for anelastic spherical shell dynamos*, International Symposium on Geophysical and Astrophysical Dynamos, Centro Stefano Franscini 2013, Ascona, Switzerland, July 7-12, 2013. (Oral)

R. Yadav, *Bridging planets and stars in dynamo models: scaling laws for compressible spherical shell dynamos*, *Astrophysical Turbulence: From Galaxies to Planets*, Dresden, Germany, Oct. 7-11, 2013. (Oral)

K. L. Yeo, **N. A. Krivova**, and **S. K. Solanki**, *Solar irradiance and the solar activity cycle*, ISSI workshop on 'The Solar Activity Cycle: Physical Causes and Consequences', Bern, Switzerland, Nov 11, 2013, invited. (Oral)

E. Yigit and **A. S. Medvedev**, *Thermospheric effects of small-scale gravity waves during sudden stratospheric warmings*, International CAWSES-II Symposium, SCOSTEP, Nagoya, Japan, November 18-22, 2013. (Oral)

T. Zhang, W. Baumjohann, W. Teh, R. Nakamura, C. Russell, J. Luhmann, **K.-H. Glassmeier**, **E. Dubinin**, **Y. Wei**, A. Du, and M. Balikhin, *Giant Flux Ropes Observed in the Magnetized Ionosphere at Venus*, European Geosciences Union General Assembly, Vienna, Austria, Apr 8-12, 2013. (Oral)

Number of entries: 177

5. Seminare / *Seminars*

Teeseminar und Kolloquium / *Tea Seminar and Colloquium*

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

Romain Maggiolo (Belgian Institute for Space Aeronomy, Belgium), Spatial distribution of O⁺ and H⁺ ions in the magnetospheric equatorial plane, 16 Apr 2013

Chris Jones, (Department of Applied Mathematics, University of Leeds, UK), Dynamo models of Jupiter's magnetic field, 17 Apr 2013

Patrick Kilian (Astronomy Department, University of Würzburg, Germany), Particle code simulation of CME driven shocks, 18 Apr 2013

K. E. Rangarajan (Indian Institute of Astrophysics, Bangalore, India), A New Solar Telescope on the Horizon - Indian National Large Solar Telescope, 22 Apr 2013

Ilan Roth (Space Science Laboratory, University of California, Berkley, USA), Terrestrial Aurora: Laboratory for Planetary, Solar and Astrophysical plasma processes, 23 Apr 2013

Hugo Breuillard (LPC2E/CNRS, Orleans, France), Determination of chorus type whistler wave distributions in Earth's inner magnetosphere and their implications on the dynamics of the outer radiation belt, 25 Apr 2013

Alexander Shapiro (PMOD/WRC, Davos, Switzerland), Variability of Sun-like stars: Models and Observations, 26 Apr 2013

Maria Cruz (Astronomy Editor of Science Magazine), Scientific Publishing from the Inside Out, 29 Apr 2013

Pavol Schwartz (Astronomical Institute of the Slovak Academy of Sciences, Slovakia), 2D Modelling of the Fine Structure of Quiet Sun Prominences, 16 May 2013

Johann Reiter (LRZ Munich, Germany), Renaissance of Global Helioseismology?, 22 May 2013

Meetu Verma (Leibniz-Institut für Astrophysik, Potsdam (AIP), Germany), Horizontal Flow Fields in and around Sunspots, 27 May 2013

Ding Yuan (University of Warwick, UK), MHD wave coupling of sunspots and active region, 28 May 2013

Jörn Warnecke (Nordita and Stockholm University, Sweden), Combining Models of Coronal Mass Ejections and Solar Dynamos, 7 Jun 2013

Durgesh Tripathi (Inter-University Centre for Astronomy and Astrophysics, Pune, India), Heating of the hot core loops in active region, 18 Jun 2013

Gwangson Choe, (Kyung Hee University, Yongin, Korea), Aly-Sturrock Paradox - Can a Coronal Magnetic Field Spontaneously Open Up in a CME?, 02 Jul 2013

Warrick Ball (Institute of Astronomy, Cambridge, UK), On the transition of stars into red giants, 11 Jul 2013

Larry Esposito (University of Colorado; USA), Dynamic models of haloes in Saturn's rings, 16 Jul 2013

João Marques (Institute for Astrophysics, University of Göttingen, Germany), The Internal Rotation of Red-Giant Stars, 9 Aug 2013

Ewa Deelman (University of Southern California, USA), Computing: advanced workflow management systems, 25 Sep 2013

Elisabeth Guggenberger (Institut für Astrophysik, Universität Wien, Austria), RR Lyrae stars: some new findings and many open questions, 30 Oct 2013

Gülner Dogan (Aarhus University, Denmark), Asteroseismic Modelling of Solar-like Stars, 4 Nov 2013

David Hathaway (Space Science Laboratory, NASA MSFC, Greenbelt, USA), The Sun's Meridional Circulation and the Solar Dynamo, 20 Nov 2013

Tina Rückriemen (Institut für Planetenforschung, DLR, Berlin, Germany), The key characteristics of the Fe-snow regime in Ganymede's core, 21 Nov 2013

Attila Hirn (Space Dosimetry Research Group, MTA Centre for Energy Research, Budapest, Hungary), A three-axis dosimetry telescope on board the International Space Station, 5 Dec 2013

Yihua Yan (National Astronomical Observatories, Chinese Academy of Sciences, China), Solar Coronal Magnetic Field Modeling and Radio Observations by the Chinese Spectral Radioheliograph, 12 Dec 2013

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

Vorträge (meistens) von Mitgliedern der Sonnengruppe / *Talks (mostly) by members of the Solar group*

Sanjiv Tiwari, Remarkably uniform structure of sunspot penumbral filaments, 05 Feb 2013

Julia Thalmann, Coronal active region modeling: instrument and binning effects, 19 Feb 2013

Davina Markiewicz-Innes, Quiet Sun explosive events: Jets, splashes and eruptions, 26 Feb 2013

Hardi Peter, Substructure of coronal loops?, 12 Mar 2013

Werner Curdt, A discussion of the AD 774/775 event, 26 Mar 2013

Manfred Schüssler, No evidence for a planetary influence on solar activity, 09 Apr 2013

Robert Cameron, Limits to solar cycle predictability: Cross-Equatorial Rushes, 16 Apr 2013

Donald Schmit, Coronal cavities and the prominence mass supply, 23 Apr 2013

Thomas Wiegmann, Coronal magnetic field modeling with SDO: II. Global modeling, 07 May 2013

Neeraj Jain, Current disruption and its spreading in collisionless magnetic reconnection, 04 Jun 2013

Werner Curdt, Swirling events 2.0, 11 Jun 2013

Sadollah Nasiri, Reconstructing force-free fields by a Lagrange multiplier technique, 18 Jun 2013

Andreas Lagg, A granular light bridge in a sunspot observed with Hinodeg, 25 Jun 2013

Sanjiv Tiwari, Depth-dependent Inversion of a Sunspot Observed from Hinode (SOT/SP). II. Global Properties, 17 Sep 2013

Alex Feller, Fast Solar Polarimeter, 01 Oct 2013

Davina Markiewicz-Innes, Post-flare supra-arcades: instabilities at the head of reconnection jets, 22 Oct 2013

Hardi Peter, Preliminary results on transition region structure and dynamics from IRIS, 29 Oct 2013

Kaori Nagashima, Interpreting HMI multi-height velocity measurements, 19 Nov 2013

Jörn Warnecke, Bipolar magnetic structures driven by stratified turbulence with a coronal envelope, 04 Dec 2013

Radoslav Bucik, Recurrent 3He-rich solar energetic particles, 10 Dec 2013

Seminar der Planetengruppe am MPS / MPS Planetary Group Seminar

Vorträge (meistens) von Mitgliedern der Planetengruppe / *Talks (mostly) by members of the Planetary group*

Paul Hartogh, Did comets deliver water to Earth?, 23 Jan 2013

Colin Snodgrass, Searching for extrasolar "solar systems" using microlensing, 27 Feb 2013

Samuel Duddy (University of Kent, UK), Characterisation of Unbound Asteroid Pairs, 26 Mar 2013

Markus Fränz, The escape of water from Mars, 24 Apr 2013

Michael Rietveld (EISCAT Scientific Association, Tromsø, Norway), Ionospheric Heating in Tromsø: What is new after 30 Years?, 03 May 2013

Roberto Bugiolacchi, (University College London, UK), From Copernicus to Tycho, a journey in the near-infrared - unraveling patterns and mineralogical information from SIR-2 lunar spectral data, 22 May 2013

Stein Haaland, On the role of ion outflow for planetary mass balance, 27 Jun 2013

Colin Snodgrass, Ground-based observations of 67P/Churyumov-Gerasimenko: What we already know and what is planned during the Rosetta Mission, 16 Jul 2013

Geraint Jones (University College London, UK): The multiple modes of interaction of comets with the solar wind, 16 Jul 2013

Pedro Lacerda (Queens University, Belfast, UK): Planetary science with Rosetta and Philae, 16 Jul 2013

Alexander Basilevsky (Vernadsky Institute for Analytical Chemistry and Geochemistry, Moscow, Russia): Search for non-basaltic rocks on Venus through analysis of 1-micron surface emissivity measured by Venus Monitoring Camera, 29 Aug 2013

Elias Roussos, Saturn's proton radiation belts: Cassini MIMI/LEMMS observations, 01 Oct 2013

Norbert Krupp, Particle measurements in the vicinity of Enceladus, Dione, and Rhea: Cassini MIMI/LEMMS results, 12 Nov 2013

H. Uwe Keller, What Do We Know about Asteroid (2867) Steins, 15 Nov 2013

Y. Skorov (Uni Braunschweig, IGEP, Germany), Cometary activity: how does it work?, 27 Nov 2013

Miriam Rengel, Tracing the gas composition of Titan's atmosphere with Herschel : Advances and Discoveries, 12 Dec 2013

IMPRS Solar System Seminar (S³ Seminar)

Typisch drei Vorträge von Doktoranden über das Thema ihrer Doktorarbeit, manchmal ergänzt durch Vortrag eines externen Vortragenden

Typically three talks by students about their PhD project, sometimes complemented by a talk of an external speaker

Yeon Joo Lee, Venus cloud structure and radiative energy balance in mesosphere

Yoann Vernisse, Classification of the interaction of planetary bodies with stellar winds by hybrid simulation

Stefan Wiehle, Hybrid simulations of Venus ionospheric magnetization states

Ilya Usoskin (Oulu), Cosmic rays in the Earth's atmosphere

18 Jan 2012

Megha Bhatt, Iron abundance estimations using the SIR-2 and other VIS-NIR spectrometers on-board Chandrayaan-1

Jayant Joshi, Spectroscopy of Sunspot Penumbra in C I 5380.3 A

Karsten Schindler, Detector Characterization Activities and Studies for Future VIS-NIR Spectrometers

1 Feb 2012

Neda Dadashi, The average Doppler shift of transition region and coronal lines

Farhad Shakeri, Cycle-related solar EUV variability

Christoph Koenders, The massloading process and the cometary bow shock position

15 Feb 2012

Shahin Jafarzadeh, Structure and dynamics of isolated internetwork bright points in the lower solar atmosphere observed by SUNRISE

David Bühler, Does the quiet Sun magnetic flux vary with time?

Lucia Duarte, Towards more realistic dynamo models of the gas giants

29 Feb 2012

Navdeep Panesar, A polar crown prominence observed by SDO and STEREO

Juan Sanchez, Phase reddening on near-Earth-asteroids: Implications for mineralogical analysis, taxonomic classification and space weathering

14 Mar 2012

Tijmen van Wettum, Different heating mechanisms for the solar corona

Dennis Röhrbein, Analysis of 3D-MHD simulations of solar-magneto convection

25 Apr 2012

Wieland Dietrich, Can the heterogeneous magnetization of the Martian crust originate from an ancient hemispherical dynamo?

Hendrik Kriegel, Hybrid simulations of Saturn's moons Enceladus and Rhea compared with Cassini magnetometer data

Benjamin Beeck, Magnetoconvection in cool stars - 3D simulations and spectral line synthesis

Jürgen Blum (TU Braunschweig, Germany), Building planets in the lab

9 May 2012

Nafiseh Masoumzadeh, Surface structure analysis of small bodies on the different scales

Chaitanya Giri, Carbon, Comets and COSAC

Kun Li, The source region of the cold ion outflowing from the Earth's ionosphere

23 May 2012

Juanjo Piqueras, Assessing effects of space radiation on the image sensor for SO/PHI

Jisesh Sethunadh, General circulation modeling of stratospheres of cold and warm Jupiters

Antoine Genetelli, Multi wavelength analysis of emerging flux using SDO

5 June 2012

Daniel Heisselmann, An experimental view on ice-particle collisions in Saturn's rings

Eugene Shalygin, Study of the Venus surface using Venus Monitoring Camera images

4 July 2012

Marc Hofmann, Granular flow in low gravity: Experiment

Jinhua Shen, Hard X-ray observation and extrapolation of coronal magnetic field

Iulia Chifu, 3D reconstruction of solar coronal features

18 July 2012

Emanuele Papini, Propagating linear waves in a convectively unstable solar model: a perturbative approach

Björn Löptien, Synthetic helioseismic data for Solar Orbiter

Jan Langfellner, Probing vortical motions with helioseismology

7 Nov 2012

Kun Li, The fate of cold ion outflow from polar ionosphere

Guneshwar Thangjam, Lithological variation and mapping of Vesta

Sebastian Höfner, Thermal modeling of active regions of cometary nuclei

21 Nov 2012

Yoann Vernisse, Stellar winds and planetary bodies simulation: transition by magnetic dipole variation

Stefan Wiehle, Hybrid simulations of Venus' dynamic plasma environment

Patricio Munoz, Theory and numerical simulations of current sheet instabilities in the solar corona

5 Dec 2012

Kok Leng Yeo, Sources of variation in solar irradiance

Konstantin Finke, Dynamo mechanism of the turbulent spherical Couette flow

Lucia Duarte, Anelastic dynamo models with variable electrical conductivity: an application to gas giants

19 Dec 2012

6. Lehrtätigkeit / *Lectures*

Vorlesungen von MPS-Wissenschaftlern an Universitäten und anderen Institutionen

Lectures of MPS scientists at universities and other institutions

Jörg Büchner: Physics of the Sun, Heliosphere and Space Weather - Key Knowledge, Georg-August-Universität Göttingen, WS 2012/13 and WS 2013/14

Physics of the Sun, Heliosphere and Space Weather - Space Weather Applications, Georg-August-Universität Göttingen, SS 2013

Laurent Gizon: Forschungsschwerpunkt: Astro- und Geophysik, Georg-August-Universität Göttingen, WS 2012/13 and WS 2013/14

Introduction to Helioseismology, Georg-August-Universität Göttingen, WS 2013/14

Physics of the Interior of the Sun and Stars, Georg-August-Universität Göttingen, WS 2012/13 and WS 2013/14

Data Analysis in Astrophysics, Georg-August-Universität Göttingen, SS 2013

Numerical Experiments in Stellar Physics, Georg-August-Universität Göttingen, SS 2013

Walter Goetz: Regionale Geologie (Seminar), Georg-August-Universität Göttingen, SS 2013

Stein Haaland: (Unkown topic), UNIS Svalbard, Norway, 20.10.– 04.12.2013

Klaus Jockers: Entstehung von Sonnensystemen (together with Harald Krüger), Georg-August-Universität Göttingen, WS 2012/13

Harald Krüger: Entstehung von Sonnensystemen (together with Klaus Jockers), Georg-August-Universität Göttingen, WS 2012/13

Manfred Schüssler: Good Scientific Practice and Ethical Issues in the Research Environment, Georg-August-Universität Göttingen, WS 2012/13, SS 2013 and WS 2013/14

7. Gutachtertätigkeit für wissenschaftliche Zeitschriften

Reviews for scientific journals

Insgesamt wurden mehr als 116 Artikel für wissenschaftliche Zeitschriften von 24 Wissenschaftlern des MPS begutachtet.

In total more than 116 articles for scientific journals were reviewed by 35 different scientists of the MPS.

Gutachter (in alphabetischer Reihenfolge)/ **Reviewer** (in alphabetical order):

J. Bischoff, H. Boehnhardt, J. Büchner, W. Curdt, P. Daly, A. Gandorfer, W. Goetz, S. Haaland, M. Hilchenbach, J. Hirzberger, D. Innes, B. Knapmeyer-Endrun, N. Krivova, E. Kronberg, H. Krüger, A. Lagg, W. Markiewicz, M. Rengel, U. Schühle, M. Schuessler, H. Sierks, L. Teriaca, T. Wiegelmann, K. Wilhelm

Zeitschriften (Anzahl Gutachten)/ Journals (number of reviews):

Journal of Geophysical Research (16)

Advances in Space Research (13)

Astronomy & Astrophysics (9)

Astrophysical Journal (9)

Solar Physics (8)

Icarus (5)

Nonlinear Processes in Geophysics (5)

Planetary & Space Science (5)

Annales Geophysicae (4)

Physics of Plasmas (4)

Geophysical Research Letters (3)

Journal of Atmospheric and Solar-Terrestrial Physics (3)

Life (3)

Applied Optics; Geoscientific Instrumentation; Methods and Data Systems; Monthly Notices of the Royal Astronomical Society; Nature; Optics Express; Physical Review Letters; Surveys in Geophysics (2 each)

Advances in Astronomy; Astrophysics and Space Science; Canadian Journal of Physics; Earth and Planetary Science; Earth, Planets and Space; Entropy; GeoResJ; Journal of Astronomical Instrumentation; Journal of Physics & Astronomy; Optical Engineering; Publications of the Astronomical Society of Japan; Review of Scientific Instruments; Science (1 each)