Max-Planck-Institut
für Sonnensystemforschung

Max Planck Institute
for Solar System Research

Tätigkeitsbericht 2014
Activity Report 2014

Inhalt
Contents

1. Wissenschaftliche Zusammenarbeit / *Scientific collaboration*

1.1 Wissenschaftliche Gäste (mit Aufenthalt ≥1 Woche)

Scientific guests (with stay ≥1 week)

Michael A'Hearn (University of Maryland, Department of Astronomy, College Park, USA), 01 Sep – 13 Dec (host: Sierks), 14 Sep – 14 Dec (host: Christensen)

Alexander Basilevsky (Vernadsky Institute for Analytical Chemistry and Geochemistry, Moscow, Russia), 01 Jul – 31 Aug (host: Markiewicz), 28 Oct – 30 Nov (host: Mall)

Sarbani Basu (Yale University, Department of Astronomy, New Haven, USA), 18 – 23 May, (host: Gizon)

Michael Bazot (Centre for Astrophysics of the University of Porto, Portugal), 06 – 10 Oct, (host: Gizon)

Lokesh Bharti (Mohanlas Sukhadia University, Udaipur, India), 29 Sep – 20 Oct (host: Solanki)

Jishnu Bhattacharya (Tata Institute of Fundamental Research, Mumbai, India), 30 Aug – 05 Sep (host: Gizon)

Dennis Bodewits (University of Maryland, College Park, USA), 14 – 31 Mar / 10 – 21 Nov (host: Sierks)

Bhola Dwivedi (Banaras Hindu University, Varanasi, India), 12 – 22 May (host: Curdt)

Anekallu Chandrasekhar (Mullard Space Science Laboratory, Dorking, UK), 02 – 06 Jun (host: Haaland)

Mark Cheung (Lockheed Martin Solar and Astrophysical Laboratory, Palo Alto, USA), 15 - 25 Mar (host: Schüssler)

Andrzej Czechowski (Space Research Centre, Warsaw, Poland), 01 – 30 Nov (host: Hilchenbach)

Vania da Deppo (Luxor Laboratory, University of Padova, Italy), 08 – 25 Aug, (host: Sierks)

Suzana da Souza (National Institute For Space Research, São José dos Campos, Brazil), 15 Aug – 14 Sep (host: Büchner)

Miguel de Val-Borro (Princeton University, USA), 04 Jul - 03 Oct (host: Hartogh)

Nicolas Dorville (Laboratoire de Physique des Plasmas, Palaiseau, France), 02 - 06 Jun (host: Haaland)

Li Feng (Purple Mountain Observatory, Nanjing, China), 22 Apr – 31 Jul (host: Inhester)

Alberto Flandes (National Autonomous University of Mexico, Institute of Geophysics, Mexico City, Mexico), 15 Jun – 26 Jul, 11 Nov – 06 Dec (host: Krüger)

Matthias Förster (Helmholtz-Zentrum, Potsdam, Germany), 14 – 18 Apr (host: Haaland)

Goel Suruchi (Udaipur Solar Observatory, India), 29 Sep – 21 Oct (host: Solanki)

Pedro Hasselmann (Observatoire de Paris, Meudon, France), 14 – 22 Aug (host: Sierks)

Frank Hill (National Solar Observatory, Tucson, USA), 09 – 15 Feb / 26 Aug – 28 Nov, (host: Gizon)

Attila Hirn (Center for Energy Research of the Hungarian Academy of Sciences, Budapest, Hungary), 11 Nov - 06 Dec (host: Krüger)

Nikolay Ignatiev (Space Research Institute, Moscow, Russia), 15 Nov – 15 Dec (host: Markiewicz)

Yaroslaw Ilyushin (Moscow State University, Moscow, Russia), 06 Sep - 03 Oct (host: Hartogh)

Emre Isik (Istanbul Kultur University, Turkey), 09 - 20 Jul (host: Schüssler)

Matthew R. M. Izawa (Department of Geography, University of Winnipeg, Canada), 28 Sep - 13 Oct (host: Schäfer), 27 Sep – 13 Oct (Nathues)

Jie Jiang (National Astronomical Observatory, Chinese Academy of Sciences, Beijing, China), 01 - 14 Dec (host: Schüssler); 19 Nov – 18 Dec (host: Solanki)

Hiroshi Kimura (Kobe University, Japan), 02 Nov - 04 Dec (host: Hilchenbach)

Pankaj Kumar (Korea Astronomy and Space Science Institute, Daejeon, Korea), 28 Jun – 03 Aug (host: Innes)

Takeshi Kuroda (Tohoku University, Sendai, Japan), 28 Sep – 01 Nov (host: Hartogh)

Ian Lai (National Central University, Chungli, Taiwan), 01 – 14 Sep (host: Hartogh)

Timothy Larson (Stanford University, USA), 14 May – 14 Jul (host: Gizon)

Karl Laundal (University of Bergen, Norway), 14 – 18 Apr (host: Haaland)

Leping Li (National Astronomical Observatory, Beijing, China), 14 Nov 2013 – 13 Nov 2014 (host: Peter)

Yan Limei (Beijing University, China), 28 Feb – 30 May (host: Peter)

Zhong-Yi Lin (Graduate Institute of Astronomy, National Central University, Jhongli City, Taiwan), 05 - 16 May, 06 – 17 Oct (host: Sierks)

Mija Lovric (University of Göttingen, Germany), 05 Nov 2014 – 31 Mar 2015 (host: Krivova)

Ajay Manglik (National Geophysical Research Institute, Hyderabad, India), 01 Sep – 31 Oct (host: Wicht)

Anwesh Mazumdar (Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research, Mumbai, India), 05 – 25 May (host: Hekker)

Hamed Moradi (Monash Centre for Astrophysics, Clayton, Australia), 08 – 15 Mar (host: Gizon)

Dieter Nickeler (Astronomical Institute, Ondřejov, Czech Republic), 26 Oct – 06 Dec (host: Wiegelmann)

Elena Petrova (Space Research Institute, Moscow, Russia), 01 – 31 Nov (host: Markiewicz)

Anatoly Remizov (Space Research Institute, Russian Academy of Sciences, Moscow, Russia), 01 Sep – 30 Nov (host: Hilchenbach)

Rob Rutten (retired from Utrecht University, The Netherlands), 23 Apr – 16 May (host: Curdt)

Takashi Sekii (National Astronomical Observatories of Japan, Tokyo, Japan), 31 Aug – 12 Sep (host: Gizon)

Jinhua Shen (Xinjiang Astronomy Observatory,Chinese Academy of Sciences, Urumqi, China), 10 Dec 2013 – 08 Jan 2014 (host: Wiegelmann)

Yu Sijie (National Astronomical Observatory, Chinese Academy of Sciences, Beijing, China), 14 Jan – 15 Dec (host: Büchner)

Johan Silen (Finnish Meterological Institute, Helsinki, Finland), 26 Oct – 17 Dec (host: Hilchenbach)

Andrew Steele (Geophysical Laboratory, Carnegie Institution of Washington, USA), 14 Jun – 14 Aug (host: Goesmann)

Hui Tian (Harvard-Smithsonian Center for Astrophysics, Cambridge, USA), 05 – 16 May (host: Curdt)

Yu Tian (University of Electronic Science and Technology of China, Chengdu, China), 01 Apr – 31 Dec 2014 (host: Hartogh)

Krishna K M Vamsi (Indian Institute of Technology, Bhubaneswar, India), 16 May – 22 Jul 2014 (host: Krivova)

Erdal Yigit (George Mason University, Fairfax, USA), 17 Jun – 16 Jul 2014 (host: Hartogh)

Andrew Youdin (University of Arizona,Tucson, USA), 23 – 27 Jun 2014 (host: Lacerda)

Xiaowei Zhou (Purple Mountain Observatory, Nanjing, China), 14 Jan – 15 Dec 2014 (host: Büchner)

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

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

Laurent Gizon: Indian Institute of Science Education and Research, Kolkata, India, 21 – 29 Mar

Stein Haaland: University of Bergen, Norway, 08 – 13 Jun

Stein Haaland: University Center, Longyearbyen,Svalbard, Norway, 26 Oct – 02 Dec

Saskia Hekker: Yale University, New Haven, USA, 11 – 19 Mar

Pedro Lacerda: Queen's University, Belfast, Ireland, 05 – 10 Sep

Miriam Rengel: Max-Planck-Institut für extraterrestrische Physik, Garching, Germany, 15 – 18 Jan

Miriam Rengel: Institut de Physique Théorique, Observatoire de Paris, France, 12 – 16 May

Miriam Rengel: Konkoly Observatory, Budapest, Hungary, 13 – 17 Oct

Jasper Schou: Stanford University, USA, 11 – 31 Mar

Jasper Schou: NorthWest Research Associates, Boulder, USA, 15 – 22 Mar

Sami K. Solanki: Kyung Hee University, Seoul, South Korea, 20 Mar – 14 May

Vytenis M. Vasyliunas: Space Science Laboratory, University of Massachusetts, Lowell, USA, 03 – 15 Aug

Jörn Warnecke: Aalto University, Espoo, Finland, 12 – 23 Aug

1.3 Projekte in Zusammenarbeit mit anderen Institutionen

Projects in collaboration with other institutions

3D structure of solar magnetic flux tubes

B. Beek in collaboration with B. Lemmerer (Karl-Franzens-Universität, Graz, Austria).

3He-Rich Solar Energetic Particle Events

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

A laboratory and telescopic study of the colours of icy solar system objects

P. Lacerda, R. Kokotanekova, and S. Lorek in collaboration with R. McCullough, T. Field, A. Fitzsimmons, A. Muntean and M. Hyland (Queen's University Belfast, UK); N. Peixinho (University of Antofagasta, Chile); A. Thirouin (Lowell Observatory, Flagstaff, USA); B. Carry (Observatoire de Nice, France); M. Wyatt (Cambridge University, UK); S. Fornasier (Observatoire de Paris, France); C. Snodgrass (Open University, Milton Keynes ,UK); O. Hainaut (European Southern Observatory, Garching, Germany).

A Magnitude Limited Survey of the Rotational Properties of Kuiper Belt Objects

P. Lacerda in collaboration with M. Lockhart and B. Davidsson (Uppsala University, Sweden).

A Search for Rising Magnetic Flux Concentrations

A. C. Birch, L. Gizon, and H. Schunker in collaboration with D. Braun (NorthWest Research Associates, Boulder, USA); Y. Fan, M. Rempel (High Altitude Observatory, 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 and T. Chatzistergos in collaboration with I. Ermolli (Istituto Nazionale di Astrofisica, Osservatorio Astronomico di Roma, Italy).

Analysis and Cross-Calibration of Historical Sunspot Area Datasets

N. Krivova, B. Inhester, and S. K. Solanki in collaboration with N. Sinha (Indian Schoolf of Mines, Dhanbad, India); L. A. Balmaceda (Instituto de Ciencias Astronómicas, de la Tierra y del Espacio, San Juan, Argentina); J. Ninković (MPG Halbleiterlabor, München, Germany).

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

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

APOGEE-CoRoT

S. Hecker in collaboration with C. Chiappini, T. S. Rodrigues, B. X. Santiago, M. A. G. Maia, L. N. da Costa (Laboratório Interinstitucional de e-Astronomia, Rio de Janeiro, Brazil); A. Miglio (University of Birmingham, UK); J. Montalbán (Università di Padova, Italy); B. Mosser, R. de Assis Peralta (Observatoire de Paris, Meudon, France); L. Girardi (Istituto Nazionale di Astrofísica, Osservatorio Astronomico di Padova, Italy); M. Valentini, F. Anders, I. Minchev, M. Steinmetz (Leibniz-Institut für Astrophysik, Potsdam, Germany); A. Noels, T. Morel (Institut d'Astrophysique et de

Geophysique, Liège, Belgium); M. Schultheis (Centre national de la recherche scientifique, Observatoire de la Côte d'Azur, Nice, France); M. Martig (Max-Planck-Institut für Astronomie, Heidelberg, Germany); C. Allende Prieto (Instituto de Astrofísica de Canarias, La Laguna, Tenerife, Spain); T. Kallinger (Institut für Astronomie, Universität Wien, Austria); R. A. García (Université Denis Diderot, Gif-sur-Yvette, France); S. Mathur (Space Science Institute, Boulder, USA); F. Baudin (Centre national de la recherche scientifique, Institut d´Astrophysique Spatiale, Université Paris, Orsay, France); T. C. Beers (Joint Institute for Nuclear Astrophysics, Center for the Evolution of the Elements, Notre Dame, USA); K. Cunha (Observatório Nacional, Rio de Janeiro, Brazil); P. Harding (Case Western Reserve University, Cleveland, USA); J. Holtzman (New Mexico State University, Las Cruces, USA); S. Majewski (University of Virginia, Charlottesville, USA); S. Mészáros (ELTE Gothard Astrophysical Observatory, Szombathely, Hungary); D. Nidever (University of Michigan, Ann Arbor, USA); K. Pan (Apache Point Observatory, New Mexico State University, Sunspot, USA); R. P. Schiavon (Astrophysics Research Institute, Liverpool John Moores University, UK); M. D. Shetrone (McDonald Observatory, University of Texas, Austin, USA); D. P. Schneider (The Pennsylvania State University, University Park, USA); K. Stassun (Vanderbilt University, Nashville, USA).

APOKASC

S. Hecker in collaboration with M. H. Pinsonneault, C. Epstein, J. A. Johnson , D. Muna, J. Tayar (The Ohio State University, Columbus, USA); Y. Elsworth, W. J. Chaplin, A. Miglio (University of Birmingham, UK); R. A. García, P. Beck, T. Ceillier (Laboratoire Astrophysique, Instrumentation Modelisation, Université Denis Diderot, Gif-sur-Yvette, France); J. Holtzman (New Mexico State University, Las Cruces, USA); S. Mathur (Space Science Institute, Boulder, USA); A. García Pérez, S. R. Majewski (University of Virginia, Charlottesville, USA); V. Silva Aguirre, D. Stello (Aarhus University, Denmark); L. Girardi (Istituto Nazionale di Astrofísica, Osservatorio Astronomico di Padova, Italy); S. Basu (Yale University, New Haven, USA); M. Shetrone (University of Texas, McDonald Observatory, Austin, USA); C. Allende Prieto, D.A. García-Hernández, O. Zamora, R. Carrera (Instituto de Astrofsica de Canarias, La Laguna, Tenerife, Spain); D. An (Ewha Womans University, Seoul, Korea); T. C. Beers (University of Notre Dame, USA); D. Bizyaev, K. Pan (Apache Point Observatory, New Mexico State University, Sunspot, USA); S. Bloemen (Radboud University Nijmegen, The Netherlands); J. Bovy (Institute for Advanced Study, Princeton, USA); K. Cunha (Observatório Nacional, Sao Cristovao, Rio de Janeiro, Brazil); J. De Ridder (Instituut voor Sterrenkunde, Katholieke Universiteit Leuven, Belgium); P. M. Frinchaboy (Texas Christian University, Fort Worth, USA); R. Gilliland, Paul Harding, F. R. Hearty, D. P. Schneider (The Pennsylvania State University, University Park, USA); D. Huber (NASA Ames Research Center, Moffett Field, USA); T. S. Metcalfe (Space Science Institute, Boulder, USA); Marie Martig, Hans-Walter Rix (Max-Planck-Institut für Astronomie, Heidelberg, Germany); B. Mosser (Observatoire de Paris, France); F. Anders, C. Chiappini (Leibniz-Institut für Astrophysik, Potsdam, Germany); T. S. Rodrigues (Laboratório Interinstitucional de e-Astronomia, Rio de Janeiro, Brazil); S. Mészáros (ELTE Gothard Astrophysical Observatory, Szombathely, Hungary); D. Nidever (University of Michigan, Ann Arbor, USA); R. P. Schiavon (Astrophysics Research Institute, Liverpool John Moores University, UK); Aldo Serenelli (Institute of Space Sciences, Barcelona, Spain); I. Ivans (University of Utah, Salt Lake City, USA); T. Kallinger (Institut für Astronomie, Universität Wien, Austria); V. V. Smith (National Optical Astronomy Observatory, Tucson, USA); Gail Zasowski (Johns Hopkins University, Baltimore, USA).

Application of MHD-equilibrium theory to Cluster data

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

ARIEL

P. Hartogh, C. Jarchow, U. Mall, M. Rengel, 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 (Istituto Nazionale di Astrofisica, Osservatorio Astronomico di Palermo, Italy); H.U. Nørgaard-Nielsen, A.

Hornstrup (Danish Space Research Institute, Copenhagen, Denmark); I. Ribas, M. Lopez-Morales (Institute of Space Sciences, Bellaterra, Spain); M. Swain, P. Deroo (Jet Propulsion Laboratory, Pasadena, USA); N. Bowles (University of Oxford, UK); V. Coudé du Foresto, A. Coustenis (Observatoire de Paris, Meudon, France); M.R. Zapatero Osorio (Instituto Nacional de Técnica Aeroespacial, Centro de Astrobiología, Madrid, Spain); D. Grodent (Université de Liège, Belgium); G. Kovacs (Konkoly Observatory, Budapest, Hungary); P.-O. Lagage (Commissariat à l'Energie Atomique et aux énergies alternatives, Saclay, France); T. Lim (Rutherford Appleton Laboratory, Didcot, UK); E. Pace (Università di Firenze, Italy); E. Palle (Instituto de Astrofísica de Canarias, Tenerife, Spain); E. Pascale (Cardiff University, UK); G. Wright (UK Astronomy Technology Centre, Edinburgh, UK), A. Medvedev (Universität Göttingen, Germany).

ASPIICS on Proba3

W. Curdt, B. Inhester,B. Podlipnik, and S.K. Solanki in collaboration with A. Mestrau-Garreau, J. Zender (European Space Research and Technology Centre, Noordwijk, The Netherlands); P. Rochus (Centre Spatiale Liège, Belgium); R. Peřestý (Aerospace Research and Test Establishment, Prague, Czech Republic); P. Heinzel (Astronomical Institute of the Academy of Science, Ondřejov, Czech Republic); A. Zhukov, M. Mierla, D. Berghmans(Royal Observatory, Brusselss, Belgium); ASPIICS Consortium.

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

L. Gizon in collaboration with T. Appourchaux (Institut d'Astrophysique Spatiale, Orsay, France); W.-T. Ni (Purple Mountain Observatory, Nanjing, China).

Astrophysical Processes in the Heliosphere (BMBF-NRF South Africa))

J. Büchner, P. Kilian, and P. Munoz in collaboration with F. Spanier (University Potchefstroom, South Africa).

BEIRUS

U. Mall in collaboration with H. Nothaft, A. Siek (AIM Infrarot Module GmbH, Heilbronn, Germany).

BepiColombo – BELA (Laser Altimeter)

R. Kallenbach, U. Christensen, 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 (Astronomisc hes Institut, Universität Bern, Switzerland); C. Fallnich (Laser Zentrum Hannover, Germany); D. Giardini (Institut für Geophysik, Eidgenössische Technische Hochschule, Zürich, Switzerland); O. Groussin (University of Maryland, College Park, USA); L. Jorda, P. Lamy (Laboratoire d'Astrophysique de 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, Portugal).

BepiColombo – MERMAG

U. Christensen in collaboration with K.-H. Glaßmeier (Technische Universität Braunschweig, Germany).

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 and 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 and M. Fränz in collaboration with D. Delcourt (Laboratoire de Physique des Plasmas, Paris, France); Y. Saito (Japan Aerospace Exploration Agency, Institute of Space and Astronautical Science, 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. Fränz and N. Krupp in collaboration with S. Orsini (PI) (Istituto di Fisica dello Spazio Interplanetario, Rome, Italy); K. Torkar (Institut für Weltraumforschung, Graz, Austria); J.-J. Berthelier (Laboratoire de Physique des Plasmas, St. Maur des Fosses, France); P. Escoubet (European Space Research and Technology Centre, Noordwijk, The Netherlands); F. Leblanc (Institut Pierre Simon Laplace, Saint Maur, Verrieres-Le-Buisson, France); K. Szego (Centre for Energy Research, Hungarian Academy of Sciences, Budapest, Hungary); O. Vaisberg (Space Research Institute, Russian Academy of Sciences, Moscow, Russia).

Brite

S. Hecker in collaboration with W. Weiss (Univerisity of Vienna, Austria); Anthony Moffat (University of Montreal, Canada).

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

N. Krupp, E. Roussos, and A. Kotova in collaboration with S. M. Krimigis, D. G. Mitchell, C. Paranicas, P. Kollmann (Applied Physics Laboratory, Johns Hopkins University, Laurel, USA); D. Hamilton (University of Maryland, College Park, USA); I. Dandouras (Institut de Recherche en Astrophysique et Planétologie, 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 a Main Belt Comet

H. Böhnhardt and C. Snodgrass in collaboration with A. Fitzsimmons (Queens University, Belfast, UK); A. Braukhane, M. Hallmann (DLR SpaceSystems, Bremen, Germany); M. Homeister (OHB-Systems AG, Bremen, Germany); G. Jones (University College, London, UK); A. Herique, W. Kofman (University Grenoble, France); H. Hsieh (University of Hawaii, Hilo, USA); Y. Alibert, K. Altwegg, A. Bieler, D. Schläppi (University of Bern, Switzerland); D. Prialnik (University Tel Aviv, Israel); O. Hainaut (European Southern Observatory, Garching, Germany); M. Capria (Istituto Nazionale di Astrofísica, Rome, Italy); E.-P. Miettinen, A. Pentilla, E. Zubko (University Helsinki, Finland); F. Moreno, L. M. Lara (Instituto de Astrofísica de Andalucía, Granada, Spain); I. Bertini, F. Mazari (Istituto Nazionale di Astrofísica, Padova, Italy); J. Davidsson (University Uppsala, Sweden); S. Lowry (University Kent, Canterbury, England); E. Jehin (University Liege, Belgium); J. Licandro (Instituto de Astrofísica de Canarias, Tenerife, Santa Cruz, Spain); N. Bowles, I. Thomas (University Oxford, England); M. Küppers (European Space Astronomy Centre, Villafranca, Spain); M. Pätzold (University Köln, Germany); M. Trieloff (University Heidelberg, Germany).

Chandrayaan-1 – SIR-2

U. Mall in collaboration with N. Goswami (Physical Research Laboratory, Ahmedabad, India).

Chromospheric microjets in sunspots

S. Solanki, J. Hirzberger, and A. Lagg in collaboration with L. Bharti (Mohanlas Sukhadia University, Udaipur, India).

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 (Rutherford Appleton Laboratory, Didcot, UK).

Cluster : Cold ion outflow during geomagnetic storms
S. Haaland in collaboration with D. Welling (University of Michigan, Ann Arbor, USA); C. Chappell (Vanderbilt University, Nashville, USA).

Cluster : Lobe density
S. Haaland in collaboration with B. Lybekk, A. Pedersen (University of Oslo, Norway).

Cluster - Magnetopause asymmetries
S. Haaland in collaboration with G. Paschmann (Max-Planck Institut für extraterrestrische Physik, Garching, Germany); B. Sonnerup (Dartmouth College, Hanover, USA).

Cluster - Magnetopause reconnection
S. Haaland in collaboration with J. DeKeyser, L. Maes, R. Maggiolo (Belgian Institute of Aeronomy, Uccle, Belgium); J. Gjerloev (Applied Physics Laboratory, Johns Hopkins University, Baltimore , USA).

Cluster - North-South Asymmetries
S. Haaland in collaboration with K. Laundal (University of Bergen, Norway).

Cluster II – CIS (Cluster Ion Spectrometer)
M. Fränz, P.W. Daly, W. Götz, and E. Kronberg in collaboration with I. Dandouras (Centre d'Etude Spatiale des Rayonnements, Toulouse, France); MPI für extraterrestrische Physik (Garching, Germany); Universities of New Hampshire, Washington, Berkeley (USA).

Cluster II – Ion outflow
M. Fränz in collaboration with M. Andre, A. Eriksson, E. Engwall (Uppsala University, Sweden); B.Lybekk, A.Pedersen (University of Oslo, Norway); C. Johnsen, N. Ostgaard (University of Bergen, Norway); M. Förster (Geoforschungszentrum Potsdam, Germany); K. Li, H. Zhao, Q.Y. Ren (Chinese Acandemy of Sciences, Beijing, China); B. Sonnerup (Dartmouth College, Hanover, USA); G. Paschmann (Max-Planck Institut für extraterrestrische Physik, Garching, Germany).

Cluster II – RAPID (Particle spektrometer RAPID); Data analysis
P.W. Daly (PI), E. Kronberg, J. Büchner and M. Rashev in collaboration with C. H. Perry (Rutherford Appleton Laboratory, Didcot, UK); M. Yamauchi, A. Vaivads, H. Breuillard (Swedish Institute of Space Physics, Kiruna, Sweden); V. Pierrard, Kris Borremans (Brussels Institute for Statistics and Analysis, Brussels, Belgium); C. Mouikis (University of New Hampshire, Durham, USA); H. Luo (Chinese Academy of Sciences, Beijing, China); D. Turner (Aerospace, LA, USA); A. Retino (Laboratoire de Physique des Plasmas, Palaiseau, France); E. Grigorenko, A. Artemyev, S. Savin (Space Research Institute, Russian Academy of Sciences, Moscow, Russia); C. Chappell (Vanderbilt University, Brentwood, USA); M. Dobynde (Skolkovo Institute of Science and Technology, Skolkovo, Russia); Arpad Kis (Geodetic and Geophysical Institute, Hungarian Academy of Science, Sopron, Hungary); Y. Shpits (UCLA, Los Angeles, USA); G. D. Reeves (Los Alamos National Laboratory, Los Alamos, USA); B. Klecker (MPI for Extraterrestrial Physics, Garching, Germany).

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 Universität Göttingen (Germany).

Collaborative Research Center 963 "Astrophysical Flow Instabilities and Turbulence" - From solar to heliospheric flows and instabilities
J. Büchner and J. Skala in collaboration with V. Bothmer (Universität 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 (Universität 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 (Universität Göttingen, Germany).

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

J. Büchner and F. Widmer in collaboration with W. Schmidt (Universität 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 (Universität Göttingen, Germany).

Comet ISON

H. Böhnhardt, W. Curdt, J.-B. Vincent and C. Snodgrass in collaboration with U. Hopp, C. Ries, M. Schmidt (Ludwig-Maximilians-Universität München, 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. Fränz in collaboration with U. Motschmann, K. H. Glassmeier (Technische Universität Braunschweig, Germany).

Comparative helioseismic study of Active Region 9787

A. C. Birch in collaboration with H. Moradi (Monash University, Melbourne , Australia), D. C. Braun (Northwest Research Associates, Boulder, USA); R. Bogart (Stanford University, USA); T. L. Duvall Jr. (NASA, Goddard Space Flight Center, Greenbelt, USA); I.González Hernández, R. Komm (National Solar Observatory, Tucson, USA); D. Haber (Joint Institute for Lab Astrophysics, Boulder, USA).

Comparison of Inversion Codes

A. Lagg in collaboration with J. M. Borrero, R. Rezai (Kiepenheuer Institut für Sonnenphysik, Freiburg, Germany); A. Asensio Ramos, A. Lopez Ariste, H. Socas-Navarro (Instituto de Astrofísica de Canarias, La Laguna, Spain); B. Lites, M. Rempel (High Altitude Observatory, Boulder, USA); T. Carroll (Leibniz-Institut für Astrophysik, Potsdam, Germany); N. Vitas (Sterrenkundig Instituut Utrecht, The Netherlands); B. Viticchie (ESA, European Space Research and Technology Centre, Noordwijk,The Netherlands).

Computer Models of Solar Eruptions

J. Büchner in collaboration with J. Santos (University of Brazilia, Brazil); S. de Souza, M.A. Alves (National Institute for Space Research, São Jose dos Campos, Brazil).

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

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

Dawn

A. Nathues, U. Christensen, H. Sierks, M. Schäfer, 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); H. Hiesinger (Institut für Planetologie, Universität Münster); T. Kneissl, N. Schmedemann (Institut für Geologische Wissenschaften, Freie Universität Berlin).

Dawn-dusk asymmetries in planetary plasma environments

S. Haaland in collaboration with A. Runov (University of California, Los Angeles, USA); C. Forsyth (Mullard Space Science Laboratory, Dorking, UK).

Decadal and Centennial Climate Response to Solar Forcing in a 3D Atmosphere-Ocean Model

N. Krivova in collaboration with G. Wen, R.F. Cahalan (NASA, Goddard Space Flight Center, Greenbelt, USA); D. Rind, J. Jonas (NASA, Goddard Institute for Space Studies, New York, USA); P. Pilewskie (Laboratory for Atmospheric and Space Physics, University of Colorado, 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

C. Jarchow and H. Böhnhardt in collaboration with G. Sonnemann, U. Berger, M. Grygalashvyly (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, L. Rezac, and C. Jarchow in collaboration with T. Cavalié, F. Billebaud, M. Dobrijevic (Université de Bordeaux, France); J. Saur (Universität Köln; Germany); E. Lellouch, R. Moreno (Observatoire de Paris, Meudon, France); A. Medvedev (Universität Göttingen, Germany).

DFG Priority Programme 1488 - Planetary Magnetism. Interior Structure and Dynamics of the ice giants

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

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

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, European Space Research and Technology Centre, Noordwijk,The Netherlands); T. Appourchaux (Institut d'astrophysique spatiale, Paris, France); D. Romagnoli, P. Spietz, U. R.M.E. Geppert (DLR - Institute for Space Systems, Bremen); R. F. Wimmer-Schweingruber (Universität Kiel, Germany); T. Sekii (Solar Observatory, 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, M. Rengel, and L. Rezac, 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 (Istituto Nazionale di Astrofisica, Osservatorio Astronomico di Palermo, Italy); H.U. Nørgaard-Nielsen. A. Hornstrup (Danish Space Research Institute, Copenhagen, Denmark); I. Ribas, M. Lopez-Morales (Consejo Superior de Investigaciones Científicas, Institut de ciències de l'espai, Bellaterra, Spain); M. Swain, P. Deroo (Jet Propulsion Laboratory, Pasadena, USA); N. Bowles (University of Oxford, UK); V. Coudé du Foresto, A. Coustenis (Observatoire de Paris, Meudon, France); M.R. Zapatero Osorio (Instituto Nacional de Técnica Aeroespacial, Centro de Astrobiología, Madrid, Spain); D. Grodent (Université de Liège, Belgium); G. Kovacs (Konkoly Observatory, Budapest, Hungary); P.-O. Lagage (Commissariat à l'Energie Atomique et aux énergies alternatives, Saclay, France); T. Lim (Rutherford Appleton Laboratory, Didcot, UK); E. Pace (Università di Firenze, Italy); Enric Palle

(Instituto de Astrofísica de Canarias, Tenerife, Spain); E. Pascale (Cardiff University, UK); G. Wright (UK Astronomy Technology Centre, Edinburgh, UK); A. Medvedev (Universität Göttingen, Germany).

Elemental abundance on population II stars

S. Solanki in collaboration with R. Holzreuter (Eidgenössische Technische Hochschule Zürich, Switzerland); H. Ludwig (Universität Heidelberg, Germany); A. Gallaghar (Observatoire de Paris, Meudon, France).

Evolution of magnetic elements

S. Solanki in collaboration with J.-C. del Toro, I. R. Bellot Rubio, D. Utz, I. Requerey (Instituto de Astrofisica de Andalucía, Granada, Spain).

ExoMars – MOMA

F. Goesmann, H. Steininger, W. Götz, M. Hilchenbach and O. Roders in collaboration with P. Mahaffy, W. Brinckerhoff (NASA, Goddard Space Flight Center, Greenbelt, USA); C. Szopa (Laboratoire Atmosphères, Milieux, Observations Spatiales, Paris, France); F. Raulin (Laboratoire Inter-universitaire des Systèmes Atmosphériques, Paris, France); Dietmar Kracht (Laser Zentrum, Hannover, Germany).

ExoMars – RAMAN – LIBS

M. Hilchenbach in collaboration with F. Rull (Centro de Astrobiología, Instituto Nacional de Técnica Aeroespacial, Madrid, Spain).

Fast solar polarimeter

A. Feller and S. K. Solanki in collaboration with L. Strüder (MPI Halbleiterlabor, Munich, Germany).

Field morphology of geodynamo models

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

Flux transport model of solar magnetism

S. Solanki, R. Cameron, and L. Gizon in collaboration with J. Jiang, D. Hathaway, L. Upton (Marshall Space Flight Center, Huntsville, USA).

Forward and inverse modeling in helio- and geophysics

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

Gaia-ESO node

S. Hekker in collaboration with Maria Bergemann (Max Planck Institute for Astronomy, Heidelberg, Germany).

Gaia-FUN-SSO (Tübitak National Observatory)

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

Galileo – EPD (Energetic Particles Detector); Data analysis

A. Lagg, M. Fränz, and E. Kronberg in collaboration with B. Mauk, C. Paranicas, A. Rymer (Applied Physics Laboratory, Johns Hopkins University, Laurel, USA); S. Kasahara (Japan Aerospace Exploration Agency, Tokyo, Japan); K.K. Khurana (University of California, Los Angeles, USA); M. Freeman (Britisch Antarctic Survey, UK); C. Jackman (University College London, UK); M. Vogt (University of Leicester, UK).

Global Convective Dynamo Simulations of the Sun and other Stars

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

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 M. Roth (Kiepenheuer-Institut für Sonnenphysik, Freiburg, Germany); P. Pallé (Instituto de Astrofísica de Canarias, 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 (Istituto Nazionale di Astrofisica, Rome, Italy); C. Aerts (Katholieke Universiteit Leuven, Belgium); J. Daszyńska-Daszkiewicz (Uniwersytet Wroclawski, Breslau, Poland); T. Corbard (Centre national de la recherche scientifique, Nice, France).

Helioseismology Inversions

L. Gizon and A. C. Birch in collaboration with J. Jackiewicz (New Mexico State University, Las Cruces , USA); M. Svanda (Astronomical Observatory, Ondřejov , Czech Republic); T. Hohage (Institut für Numerische und Angewandte Mathematik, Universität Göttingen, Germany).

Helioseismology of granulation

L. Gizon and A. C. Birch in collaboration with D. C.Braun (NorthWest Research Associates, Boulder, USA); T. L. Duvall Jr. (NASA, Goddard Space Flight Center, Greenbelt, USA).

Helioseismology of the Solar Dynamo

A. C. Birch and J. Schou in collaboration with M. Woodard, A. Crouch (NorthWest Research Associates, Boulder, USA)

Helmholtz-Allianz "Planetary Evolution and Life"

H. Böhnhardt and J. Wicht 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 (Netherlands Institute for Space Research, Groningen, The Netherlands); A. Boogert, S. Lord, P. Morris, Q. Xie, C. Borys (Infrared Processing and Analysis Center, California Institute of Technology, Pasadena, USA); E. Caux, O. Coeur-Joly, D. Rabois (Centre d'Etude Spatiale des Rayonnements, Toulouse, France); A. Lorenzani (Istituto Nazionale di Astrofisica, Osservatorio Astrofisico di Arcetri, Florence, Italy); T. Marston, D. Teyssier (European Space Astronomy Centre, 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 (Observatoire de Paris, France); F. Herpin (Laboratoire d'Astrophysique de Bordeaux, France); M. Olberg (Chalmers University of Technology, Gothenburg, Sweden).

Hinode data analysis

A. Lagg, S. K. Solanki, D. Bühler, Sanja Danilovic, M. van Noort, and T. Riethmüller in collaboration with S. Tiwari (NASA Marshall Space Flight Center, Huntsville, USA); Jayant Joshi (Stockholm University, Sweden); National Astronomical Observatory of Japan.

HMI Calibration

T. Duvall Jr. and J. Schou in collaboration with P. Scherrer, S. Couvidat, R. Bogart, A. Norton (Stanford University, USA).

HMI Point Spread Function

T. Duvall Jr. in collaboration with A. Norton (Stanford University, USA); M. Chang (Lockheed Martin, Palo Alto, USA).

HssO (Herschel Solar System Observations)

M. Rengel, P. Hartogh, C. Jarchow, and L. Rezac 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 (Laboratoire d'Astrophysique, Observatoire de Bordeaux, France); E. Lellouch, R. Moreno, N. Biver, D. Bockelee-Morvan, R. Courtin, J. Crovisier, T. Encrenaz (Observatoire de Paris, Medeun, 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 simulations of asteroids and comets with Hydrocodes

N. Oklay, J.-B. Vincent, and H. Sierks 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 (Physical Meterological Observatory Davos, Switzerland); J. D. Haigh, Y. C. Unruh (Imperial College, London, UK).

InSight – SEIS

M. Bierwirth, U. Christensen, B. Knapmeyer-Endrun and L. Gizon in collaboration with B. Banerdt, K. Hurst (Jet Propulsion Laboratory, Pasadena, USA); P. Lognonné, S. de Raucourt (Institut de Physique du Globe de Paris, France); P. Zweifel, D. Mance (Eidgenössische Technische Hochschule Zürich, Switzerland); T. Pike (Imperial College London, UK); D. Mimoun (Institut Supérieur de l'Aéronautique et de l'Espace, Toulouse, France); S. Calcutt (Oxford University, UK); P. Laudet, L. Kerjean (Centre national d'études spatiales,Toulouse, France).

Interplanetary Micrometeroid 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-Institut für Kernphysik, 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, Ondřejov, 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, Jhongli City, Taiwan).

Ion Acceleration in the Magnetosphere

E. Kronberg 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).

IRIS data analysis

H. Peter in collaboration with B. de Pontieu (Lockheed Martin Solar and Astrophysics Lab, Palo Alto, USA); Hui Tian (Harvard Smithsonian Center for Astrophysics, Cambridge, USA); Peter Young (George Mason University, Fairfax, USA).

IRIS line identification

W. Curdt in collaboration with B. de Pontieu (Lockheed Martin Solar and Astrophysics Laboratory, Palo Alto, USA); A. Daw (Goddard Space Flight Center, Greenbelt, USA); S. Jaeggli (Montana State University, Bozeman, USA); H. Tian (Harvard-Smithsonian Center for Astrophysics, Cambridge, USA); P. Young (George Mason University, Fairfax, USA).

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, Toulouse, France); D. Delcourt (Laboratoire de Physique des Plasmas, Orsay, France); E. Grigorenko, D.

Shklyar (Space Research Institute, Moscow,Russia); L. Kistler (University of New Hampshire, Durham , USA); R. Maggiolo (Institut d'Aéronomie Spatiale de Belgique, Brussels, Belgium); D. Welling (University of Michigan, Ann Arbor, USA).

ISSI team "Magnetosphere-ionosphere-thermosphere Coupling: Differences and Similarities between the Two Hemispheres"

S. Haaland in collaboration with M. Förster (Helmholtz-Zentrum Potsdam, Germany); I. Cnossen (British Antarctic Survey, Cambridge, UK); A. Aruliah (University College London, UK); M. Conde (University of Alaska, Fairbanks, USA); A. Ridley (University of Michigan, Ann Arbor, USA).

ISSI team "Solar Heliospheric Lyman Alpha Profile Effects"

W. Curdt in collaboration with M. Snow, G. Holsclaw (Laboratory for Atmospheric and Space Physics, Boulder, USA); M. Kretzschmar (Centre national de la recherche scientifique, Orleans, France); E. Quémerais (Laboratoire Atmosphères, Milieux, Observations Spatiales, Guyancourt, France); J. Clarke (Boston University, USA); R. Gladstone (Southwest Research Institute, San Antonio, USA); M. Haberreiter (Physikalisch-Metorologisches Observatorium, Davos, Switzerland).

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

W. Curdt in collaboration with N. Raoufi (Johns Hopkins University, Baltimore, USA); E. Pariat (Observatoire de Paris, Meudon, France); S. Patsourakos (University of Ioannina, Greece); S. Antiochos (NASA, Goddard Space Flight Center, Greenbelt, USA); V. Archontis (University of St.Andrews, UK); E. DeLuca (Harvard-Smithsonian Center for Astrophysics, Cambridge, USA); H. Mason (University of Cambridge, UK); F. Moreno-Insertis (Instituto de Astrofísica de Canarias, La Laguna, Tenerife, Spain); M. Shimojo (Nobeyama Solar Radio Observatory, Nagano, Japan); T. Torok (Predictive Science Inc., San Diego, USA); A. Sterling (NASA Marshall Space Flight Center, Huntsville, USA).

JUICE -SWI

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

JUICE-GALA (Ganymede Laser Altimeter)

R. Kallenbach 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 Astrofisica de Andalucia, Granada, Spain).

JUICE-MAG

U. Christensen in collaboration with Michele Dougherty (Imperial College London, UK).

JUICE-PEP

N. Krupp, M. Fränz, and E. Roussos in collaboration with D. Delcourt (Laboratoire de Physique des Plasmas, Paris, France); S. Barabash (Swedish Institute of Space Physics, Kiruna, Sweden).

Jupiter Charging Analysis Tool (JCAT)

E. Roussos in collaboration with David Rodgers (ESA, European Space Research and Technology Centre, Noordwijk, The Netherlands); Pete Truscott (Kallisto Consultancy, Farnborough, UK); Y. Futaana, S. Barabash (Swedish Institute of Space Physics, Kiruna, Sweden).

KASC (Kepler Asteroseismic Science Consortium)

L. Gizon, S. Hekker, H. Schunker, and J. Schou in collaboration with W. Ball (Universität Göttingen, Germany).

LIS Experiment on Luna-Globe and Luna-Resource Landers

U. Mall in collaboration with O. Korablev, E. Grigorenko, D. Shklyar (Space Research Institute, Russian Academy of Sciences, Moscow, Russia); I. Dandouras (Institut de Recherche en

Astrophysique et Planétologie, Toulouse, France); D. Delcourt (Laboratoire de Physique des Plasmas,Orsay, France); L. Kistler (University of New Hampshire, Durham, USA); R. Maggiolo (Institut d'Aéronomie Spatiale de Belgique, Brussels, Belgium); D. Welling (University of Michigan, Ann Arbor, USA).

Lithium Abundances in Globular Clusters

G. Angelou in collaboration with R. Gratton, V. D'Orazi, S. Lucatello, Y. Momany (Osservatorio Astronomico di Padova, Italy); E. Carretta, A. Bragaglia (Istituto Nazionale di Astrofísica, Osservatorio Astronomico di Bologna, Italy).

Long integration polarimetry of solar fields

S. Solanki in collaboration with A. Gheidi Sharan, T. Mirtorabi (Alzahra University, Tehran, Iran); S. Jafarzadeh (Institute of Theoretical Astrophysics, Oslo, Norwegen).

Magnetic reconnection – electron physics: simulation and laboratory experiments

J. Büchner and N. Jain in collaboration with O. Grulke (Max-Planck-Institut für Plasmaphysik, Greifswald, Germany).

Majis for ESA's Juice mission

A. Nathues and H. Böhnhardt in collaboration with Y. Langevin (Institut d'Astrophysique Spatiale, Centre national de la recherche scientifique, Université Paris Sud, Orsay, France) and G. Piccioni (Istituto Nazionale di Astrofísica / Istituto di Astrofisica e Planetologia Spaziali, Roma, Italy).

Mars aeronomy

M. Fränz in collaboration with H. Opgenoorth, D. Andrews (Swedish Institute of Space Physics, Uppsala, Sweden).

Mars and Venus sheath waves

M. Fränz in collaboration with N. Borisov (Institute of Terrestrial Magnetism, Ionosphere and Radiowave Propagation of the Russian Academy of Sciences, Troitsk, Russia); E. Echer (Instituto Nacional de Pesquisas Espaciais, São José dos Campos,Brazil).

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

M. Fränz in collaboration with R. Lundin (PI), S. Barabash (Swedish Institute of Space Physics, Kiruna, Sweden); D. Winningham, R. Frahm (Southwest Research Institute, San Antonio, USA); P. Wurz (Universität Bern, Switzerland); A. Coates (Mullard Space Science Laboratory, London, UK); M. Grande (Rutherford Appleton Laboratory, Didcot, UK); J. A. Sauvaud, A. Fedorov (Centre d'Etude Spatiale des Rayonnements, Toulouse, France); E. Kallio (Finnish Meteorological Institute, Helsinki, Finland); S. Orsini (Istituto di Fisica dello Spazio Interplanetario., Roma, Italy); C. C. Curtis (University of Arizona, Tuscon, USA).

Mars Express – HRSC

W.J. Markiewicz, N. Hoekzema and O. Stenzel in collaboration with K. Gwinner, T. Roatch, H. Hofmann (DLR - Institut für Planetenforschung, Berlin, Germany); G. Neukum, S. Walter, S. van Gasselt (Freie Universität, Berlin, Germany); L. Petrova (Space Research Institute, Russian Academy of Sciences, Moscow, Russia); Dr. Dennis Reiss (Universität Münster, Germany).

MARSIS

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

Mars Science Laboratory (MSL) Project

W. Götz in collaboration with J. Grotzinger (California Institute of Technology, Pasadena, USA); M. Meyer (NASA, USA); R. Gellert (University of Guelph, Canada); R. C. Wiens (Los Alamos National Laboratory, Los Alamos, USA); D. F. Blake (NASA Ames Research Center, Moffett Field, USA); I. Mitrofanov (Space Research Institute, Moscow, Russia); K. S. Edgett, M. C. Malin (Malin Space

Science Systems, San Diego, USA); D. Hassler (Southwest Research Institute, San Antonio, USA); J. Gómez-Elvira (Centro de Astrobiología, Torrejón de Ardoz, Spain); Paul Mahaffy (Goddard Space Flight Center, Greenbelt, USA).

Max-Planck-Princeton Research Center for Plasma Physics

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

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

C. Jarchow 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 (Japan Aerospace Exploration Agency, Tsukuba, Japan); J. Mendrok (Luleå University of Technology, Sweden); A. Medvedev (Universität Göttingen, Germany).

Mercury dynamo

J. Wicht and S. Schuh in collaboration with D. Heyner, K.-H. Glassmeier (Institut für Geophysik und extraterresteische Physik, Technische Universität Braunschweig, Germany).

MHD Equilibria

T. Wiegelmann in collaboration with D. Nickeler (Astronomical Institute of the Czech Academy of Sciences, Ondřejov, Czech Republic); Thomas Neukirch (School of Mathematics and Statistics, University of St. Andrews, UK).

Mixing in Red Giant Branch Stars

G. Angelou in collaboration with J. Lattanzio, S. Campbell, T. Constantino (Monash Centre for Astrophysics, Monash University, Melbourne, Australia); R. Stancliffe (Argelander-Institut für Astronomie, Universität Bonn, Germany), R. Church (Astronomy & Theoretical Physics, Lund Observatory, Sweden).

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

A. C. Birch, L. Gizon, and H. Schunker in collaboration with D. Braun, A. Crouch (NorthWest Research Associates, Boulder, USA); J. Toomre, D. Haber, B. Hindman (Joint Institute for Lab Astrophysics, University of Colorado, Boulder, USA); T. Duvall (NASA, Goddard Space Flight Center, Greenbelt, USA); M. Rempel, Y. Fan, R. Centeno (High Altitude Observatory, Boulder, USA); P. Scherrer (Stanford University, USA); J. Jackiewicz (New Mexico State University, Las Cruces, USA).

Modelling brightness variations of Sun-like stars on timescales from minutes to decades

B. Beeck, R. Cameron, N. Krivova, M. Schüssler, A. Shapiro, S. Solanki, and K. L. Yeo in collaboration with Y. Unruh (ImperialCollege, London, UK); W. Ball, W. Finsterle, W. Schmutz (Physikalisch-Metorologisches Observatorium, Davos, Switzerland), A. Reiners, T. Reinhold (Universität Göttingen, Germany).

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

T. Wiegelmann and S. Schuh in collaboration with C. J. Schrijver (Lockheed Martin Solar and Astrophysics Laboratory, Palo Alto, USA); Tilaye Tadesse (NASA, Goddard Space Flight Center, USA); J. Thalmann (Institute for Physics, University of Graz, Austria).

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

N. Krivova, K. L. Yeo, A.Shapiro, and S. K. Solanki in collaboration with G. Cessateur, R.Tagirov, W. Schmutz (Physical Meterological Observatory Davos, Switzerland); M. Kretzschmar, M. Dominique

(Observatoire Royal de Belgique, Brussels, Belgium); G. Thuillier (Laboratoire Atmosphères, Millieux, Observations Spatiales, Paris, France).

Observations of comets

C. Tubiana, H. Böhnhardt, C. Snodgrass and J.-B. Vincent in collaboration with K. Meech, H. Hsieh, J. Pittichová (Institute for Astronomy, Hawaii, USA); O. Hainaut (European Southern Observatory, 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 (Jet Propulsion Laboratory, 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 Science Center, Moffet Field, USA); O. Groussin, P.Lamy (Laboratoire d'Astrophysique de Marseille, France); I. Toth (Konkoly Observatory, Budapest, Hungary); E. Jehin, J. Manfroid, D. Hutsemékers (Université de Liège, Belgium); T. Lister (Las Cumbres Observatory, Santa Barbara, USA); E. Mazzotta Epifani (Istituto Nazionale di Astrofisica, Napoli, Italy); G. Paulo Tozzi (Istituto Nazionale di Astrofisica, Arcetri Observatory, Florence, Italy).

Particle acceleration at the Sun

J. Büchner in collaboration with W. Gan, S. Liu (Purple Mountain National Observatory, Chinese Academy of Sciences, 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. Böhnhardt and C. Tubiana in collaboration with S. Bagnulo (European Southern Observatory, Santiago de Chile, Chile / Armagh Observatory, UK); L. Barrera (Universidad Metropolitana de Ciencias de la Educación, Santiago de Chile, 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 (Instituto de Astrofísica de Andalucía, Granada, Spain); M. Mumma, M. DiSanti, B. Bonev (NASA, Goddard Space Flight Center, Greenbelt, USA); D. Prialnik, E. Beer-Harari (Tel Aviv University, Israel); G. P. Tozzi (Istituto Nazionale di Astrofísica, Arcetri Observatory, Florence, Italy); D. Wooden (PI) (NASA Ames Research 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).

Plasmoid Instability in current sheets

J. Büchner and F. Widmer in collaboration with N. Loureiro (Instituto Superior Técnico, Lisbon, Portugal)

PLATO (PLAnetary Transits and Oscillations of stars)

L. Gizon, M. Ammler-von Eiff, R. Burston, and N. Krivova in collaboration with European consortium (comprising more than 100 institutions) led by H. Rauer (DLR - Institut für Planetenforschung, Berlin).

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

L. Gizon (coordinator), R. Burston, I. Pardowitz, S. Schuh, M. Ammler-von Eiff, and H. Schunker in collaboration with H. Moradi (Monash University, Australia); T. Appourchaux (Institut d'Astrophysique Spatiale, Orsay, France); C. Catala, R. Samadi (Observatoire de Paris, Meudon, France); M. Deleuil (Laboratoire d'Astrophysique de Marseille, France); N. Walton (Institute of Astronomy, University of Cambridge, UK); P. Giommi (Agenzia Spaziale Italiana, ASI Science Data Center, Rome, Italy); P. Bodin (Centre national d'études spatiales, Toulouse, France).

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

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

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, Switzerland); Y. Stockman, J.-M. Defise, J.-P. Halain, P. Rochus (Centre Spatial de 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, USA); M. Kretzschmar, T. Dudok deWit (Centre national de la recherche scientifique, 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, Belgium); J. Zender, A. De Groof, (ESA); S. Poedts, M. Sarp Yalim (Katholieke Univerteit 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).

Quiet Sun magnetism probed in the IR

S.K. Solanki and A. Lagg in collaboration with M. Martínez Gonzales, M. Collados (Instituto de Astrofisica de Andalucía, Granada, Spain).

RAISE – Rapid Imaging Spectrograph Experiment

U. Schühle 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, Goddard Space Flight Center, Greenbelt, USA); H. Michaelis (DLR, Institut für Planetenforschung, Berlin, Germany).

Reconstruction of Solar Irradiance Using a Flux Transport Model

M. Dasi, N. Krivova, and S. K. Solanki in collaboration with Y.C. Unruh (Imperial College London, UK), 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, K. L Yeo, and A. Shapiro in collaboration with a German consortium led by F.-J. Lübken (Leibniz Institut für Atmosphärenphysik, Kühlungsborn, Germany).

Rosetta – CONSERT (Radio Tomography Project)

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

Rosetta – COSAC (PHILAE)

F. Goesmann, H. Böhnhardt, and H. Krüger in collaboration with F. Raulin (Laboratoire Inter-universitaire des Systèmes Atmosphériques, Creteil Cedex, France); U. J. Meierhenrich (Université Nice-Sophia Antipolis, Nice, France); C. Szopa (Laboratoire Atmosphères, Milieux, Observations Spatiales, Université de Versailles, Paris, France).

Rosetta – COSIMA

M. Hilchenbach (PI), H. Krüger, O. Stenzel, and J. Paquette in collaboration with K. Altwegg (Physikalisches Institut, Universität Bern, Switzerland); B. C. Clark (Lockheed Martin Astronautics,

Denver, USA); H. Cottin, F. Raulin (Laboratoire Inter-universitaire des Systèmes Atmosphériques, Creteil Cedex, France); G. Haerendel (Max-Planck-Institut für extraterrestrische Physik, Garching, Germany); C. Engrand (Centre de Spectrométrie Nucléaire et de Spectrométrie de Masse, Orsay, France); R. Schulz (European Space Research and Technology Centre, Noordwijk, The Netherlands); A. Glasmachers (Universität Wuppertal, Germany); E. Gün (Max-Planck-Institut für Kernphysik, Heidelberg, Germany); H. Henkel, H. von Hörner, A. Koch (von Hörner 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. Rüdenauer (Institut für Physik, Seibersdorf, Austria); J. Rynö, J. Silén (Finnish Meteorological Institute, Helsinki, Finland); W. Steiger (ARC Seibersdorf Research GmbH, Seibersdorf, Austria); T. Stephan (University of Chicago, USA); L. Thirkell, R. Thomas, C. Briois (Laboratoire de physique et chimie de l'environnement et de l'espace, Orléans, France); K. Torkar (Institut für Weltraumforschung, Graz, Austria); M. Trieloff (Mineralogisches Institut, Universität Heidelberg, Germany); K. Varmuza (Institut für Verfahrenstechnik, Umwelttechnik und Technische Biowissenschaften, Technische Universität Wien, Austria); K. P. Wanczek (Institut für Anorganische und Physikalische Chemie, Universität Bremen, Germany); E. Zinner (Laboratory for Space Sciences, Washington University, St. Louis, USA.)

Rosetta – MIRO (Mirowave 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 (Jet Propulsion Laboratory, Pasadena, USA); D. Muhleman (California Institute of Technology, 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 - Institut für Planetenforschung, Berlin, Germany); P. Schlörb (University of Massachusetts, Amherst, USA).

Rosetta – OSIRIS

H. Sierks (PI), J. Agarwal, I. Büttner, P. Gutierrez, I. Hall, N. Oklay, C. Snodgrass, C. Tubiana, J.-B. Vincent, S. Boudreault, X. Shi, A. Gicquel, G. Kovacs, C. Güttler, N. Hoeksema, and M. Hofmann 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 (Centro di Ateneo di Studi e Attività Spaziali, 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 (European Space Research and Technology Centre, Noordwijk, The Netherlands); M. 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, Centre national de la recherche scientifique, Verrière-le-Buisson, France); M. Fulle (Osservatorio Astronomica de Trieste, Italy); H. Michalik (Institut für Datentechnik und Kommunikationsnetze, Technische Universität 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 (Istituto Nazionale di Astrofísica, Osservatorio Astronomico, Padova, Italy); M. Küppers, R. Moissl (European Space Astronomy Centre, Madrid, Spain).

Rosetta –ROMAP (PHILAE)

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

Rosetta – PHILAE (Rosetta Lander)

H. Böhnhardt and R. Roll in collaboration with S. Ulamec (DLR, Köln, Germany); J. P. Bibring (Institut d'Astrophysique Spatiale, Paris, France); P. Gaudon (Centre national d'études spatiales, Toulouse, France).

Rosetta – RTOF/ROSINA

U. Mall in collaboration with H. Balsiger (PI) (Universität Bern, Switzerland); Belgian Institute for Space Aeronomy (Brussels, Belgium); Centre d'Etude Spatiale des Rayonnements (Toulouse, France); Institut Pierre Simon Laplace (Saint Maur, France); Institut für Datentechnik und Kommunikationsnetze (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 (Hungarian Academy of Sciences, Centre for Energy Research, Budapest, Hungary); M. Sperl (DLR, Institut für Materialphysik im Weltraum, Köln, Germany); W. Arnold (Universität des Saarlands, Saarbrücken / Universität Göttingen, Germany); Alberto Flandes (Instituto de Geofisica, La Universidad Nacional Autónoma de México, Coyoacán, Mexico).

SDO/HMI Multi-Height Velocity Measurements

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

SDO-based magnetic modeling of the solar corona

T. Wiegelmann in collaboration with J. T. Hoeksema, X. Sun (Hansen Experimental Physics Laboratory, Stanford University, USA); J. Thalmann (Institute for Physics, Karl-Franzens-Universität, Graz, Austria); Tilaye Tadesse (NASA, Goddard Space Flight Center, Greenbelt, 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. Hanasoge in collaboration with T. L. Duvall (NASA, Goddard Space Flight Center, Greenbelt, USA).

SELENE2-SEIS

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

Simulation of deep solar magneto-convection

M. Schüssler in collaboration with 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 and F. Jenko (University of California, Los Angeles, USA).

SLAM - Solar Lower Atmosphere and Magnetism

A. Gandorfer, J. Hirzberger, A. Lagg, A. Feller, S. K. Solanki, M. van Noort, D. Bühler, A. Liu, R. Gafeira, and T. Riethmüller in collaboration with M. Collados (Instituto de Astrofísica de Canarias, La Laguna, Tenerife, Spain); Kiepenheuer-Institut für Sonnenphysik (Freiburg, Germany); Institute for Solar Physics, Stockholm University, 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 - Institut für Planetenforschung, Berlin, Germany); H. P. Röser (Institut für Raumfahrtsysteme, Universität Stuttgart, Germany).

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

M. Hilchenbach and J. Paquette in collaboration with H. Balsiger, A. Bürgi, J. Fischer, P. Wurz, (Physikalisches Institut, Universität Bern, Switzerland); D. Hovestadt, B. Klecker, P. Laeverenz, M. Scholer (Max-Planck-Institut für Extraterrestrische Physik, Garching, Germany); F. M. Ipavich, M. A. Coplan, G. Glöckler, 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, Technische Universität 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 (Institute for the Study of Earth, Oceans, and Space, 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, U. Schühle, and D. Innes 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, Goddard Space Flight Center, Greenbelt, USA); D. Hassler (Southwest Research Institute, Boulder, USA); P. G. Judge (High Altitude Observatory, 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, Ondřejov, Czech Republic); E. Avrett, H. Tian (Harvard-Smithsonian Center for Astrophysics, Cambridge, USA); P. Schwartz (Tatranska Lomnica Observatory, Slovak Republic); M. Haberreiter (Physikalisch-Metorologisches Observatorium Davos, Davos, Switzerland)

Solar Control of the Terrestrial Magnetotail

R. Bučik in collaboration with A. Opitz, P. Kajdic (European Space Research and Technology Centre, Noordwijk, The Netherlands); J.-A. Sauvaud, B. Lavraud, C. Jacquey (Université de Toulouse, France); A. Klassen (Christian-Albrechts-Universität, 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 (John Hopkins University, Laurel, USA).

Solar coronal numerical simulation results comparison with flare magnetic field observations

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

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

M. Dasi Espuig, N. Krivova, S. K. Solanki and R. Cameron in collaboration with R. Arlt, V. Senthamizh Pavai (Leibniz-Institut für Astrophysik, Potsdam, Germany); I. Usoskin, K. Mursula (University of Oulu, Finland).

Solar Dynamics Observatory

L. Gizon, S. K. Solanki and J. Schou in collaboration with P. H. Scherrer (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

R. Cameron, M. Schüssler, and S. Schuh in collaboration with J. Jiang (National Astronomical Observatory, Beijing, China); E. Isik (Istanbul Kultur University, Istanbul, Turkey).

Solar flares

T. Wiegelmann in collaboration with J. Jing, H. Wang (New Jersey Institute of Technology, Newark, USA); C. Liu (Space Weather Research Laboratory, New Jersey Institute of Technology, Newark, USA); J. Chen (Xinjiang Astronomical Observatory, Chinese Academy of Sciences, Umuqi, China); P. Vemareddy (Udaipur Solar Observatory, Udaipur, India); J. Zhao (Purple Mountain Observatory, Nanjing, China).

Solar infrared spectropolarimetry

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

Solar observations with ALMA

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

Solar Orbiter: EUI

W. Curdt, D. Innes, L. Teriaca, S. K. Solanki, U. Schühle, J. Büchner, R. Aznar Cuadrado 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, 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, Germany) .

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

L. Teriaca, S. K. Solanki, J. Woch, R. Aznar Cuadrado, and U. Schühle in collaboration with E. Antonucci, G. Nicolini, S. Fineschi, L. Abbo, A. Bemporad, G. Capobianco, G. Crescenzio, G. Massone, D. Telloni (Istituto Nazionale di Astrofísica, Osservatorio Astronomico di Torino, Italy); G. Naletto, P. Nicolosi, F. Frassetto, M.-G. Pelizzo, L. Poletto, G. Tondello, P. Zuppella, E. Verroi (Università di Padova, Italy); M. Romoli, M. Focardi, M. Pancrazzi, F. Landini, M. Velli, G. Noci, M. Landini (Università di Firenze, Italy); D. Spadaro (Osservatorio Astrofisico di Catania, Italy); V. Andretta (Osservatorio Astronomico di Capodimonte, Italy); M. Uslenghi, S. Incorvaia, M. Fiorini (Istituto Nazionale di Astrofísica, Istituto di Astrofisica Spaziale e Fisica Cosmica, Milano, Italy); V. Da Deppo (Consiglio Nazionale delle Ricerche, Rome, Italy); M. A. Malvezzi (Università di Pavia, Italy); A. Ciaravella, F. Reale (Università di Palermo, Italy); T. Strauss (Istituto Nazionale di Astrofísica, Napoli, Italy); J. D. Moses (Naval Research Laboratory, USA); A. Berlicki, P. Heinzel (Astronomical Institute, Academy 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, (University 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, Milano, Italy).

Solar Orbiter: PHI

S. K. Solanki, J. Woch, A. Feller, A. Gandorfer, L. Gizon, J. Hirzberger, A. Lagg, U. Schühle, T. Riethmüller, B. Löptien, A.C. Birch, J. Schou, and T. Wiegelmann in collaboration with J. C. del Toro Iniesta (Instituto de Astrofísica de Andalucía, Consejo Superior de Investigaciones Científicas, Granada, Spain), E. Sanchis Kilders (Universidad de València, Spain), D. Orozco Suárez (Instituto de Astrofísica de Canarias, La Laguna, Spain), A. Álvarez Herrero (Instituto Nacional de Técnica

Aerospacial, Torrejón de Ardoz, Spain), I. Pérez Grande (Instituto Univeristario de Microgravedad, Universidad Politécnica de Madrid, Spain), J. M. Gómez Cama (Universidad 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, D. Innes, S. K. Solanki, L. Teriaca, U. Schühle, H. Peter, and 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 Laboratory, 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, Goddard Space Flight Center, Washington, 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 Obervatorium Davos, Switzerland); T. Feigl (Fraunhofer Institut für Angewandte Optik und Feinmechanik, Jena, Germany); A. Gottwald, U. Kroth, C. Laubis, R.M. Klein, M. Richter, F. Scholze (Physikalisch-Technische Bundesanstalt, Berlin, Germany)

Solar spectrum and its variability from ISS/SolACES, ISS/SOLSPEC and Picard/PREMOS

N. Krivova, A. Shapiro and 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, E. Rozanov, T. Sukhodolov, W. Schmutz, M. Haberreiter (Physical Meterological Observatory Davos, Switzerland); C. Bolduc, P. Charbonneau (Université de Montréal, Canada); J. Lean (Naval Research Laboratory, Washington, USA); S. Melo (University of Toronto, Canada); V. Delouille, B. Mampeay (Solar-Terrestrial Centre of Excellence, Brussels, Belgium); J. Harder, M. Snow, T. Woods (Laboratory for Atmospheric and Space Physics, University of Colorado, USA); J.-M. Perrin (Observatoire de Haute-Provence, Centre national de la recherche scientifique, Saint-Michel, France).

Solar Stereoscopy

B. Inhester in collaboration with International Space Science Institute (Bern, Switzerland); T. Dudoc deWitt (Centre national de la recherche scientifique, Orleans, France); A. Vouridas (Naval Research Laboratory, Washington, USA); J.-F. Hochedez (Royal Observatory of Belgium, Brussels, Belgium); A. Llebaria (Laboratoire d'Astronomie Spatiale, Marseille, France); J. P. Wuelser (Lockheed Martin Solar and Astrophysics Laboratory, Palo Alto, USA); F. Auchere (Institut d'Astrophysique Spatiale, Orsay, France).

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

L. Teriaca, H. Peter, U. Schuehle, and S.K. Solanki collaboration with S. Imada, T. Shimizu (Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency, Tokyo, Japan); C. M. Brown, G. A. Doschek, C. Korendyke, H. P. Warren (Naval Research Laboratory, Washington, USA); J. M. Davila, J. Klimchuk (NASA, Goddard Space Flight Center, Greenbelt, USA); J. L. Culhane, L. Green, L. K. Harra, B. Winter (Mullard Space Science Laboratory, Dorking, UK); F. Auchère, E. Buchlin, J.-C. Vial (Institut d'Astrophysique Spatiale, Orsay, France); V. Martínez-Pillet, H. Socas-Navarro, J. Trujillo-Bueno (Instituto de Astrofísica de Canarias, La Laguna, Tenerife, Spain); V. Andretta, G. Cauzzi, S. Fineschi, D. Spadaro (Istituto Nazionale di Astrofisica, Italy); S. Parenti (Royal Observatory of Belgium, Brussels, Belgium); B. Kliem (Fraunhofer-Institut für Angewandte Polymerforschung, Universität Potsdam, Germany); G. Del Zanna (University of Cambridge, UK); S.

Patsourakos (University of Ioannina, Greece); A. Fludra (Rutherford Appleton Laboratory, Didcot, UK); M. Siemer (DLR, Institut für Raumfahrtsysteme, Bremen, Germany); L. Poletto (Consiglio Nazionale delle Ricerche, Padua, Italy); D. Hassler (Southwest Research Institute, Boulder, USA); M. Carlsson (Institute of Theoretical Astrophysics, Oslo, Norway); J. Dudik (Astronomical Institute, Academy of Sciences, Ondřejov, Czech Republic); S. Gburek (Space Research Center, Polish Academy of Sciences, Warsaw, Poland); T. Watanabe (National Astronomical Observatory, Tokyo, Japan); K. Yoshihara (Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency, Tokio, Japan); C. DeForest (Southwest Research Institute, San Antonio, USA).

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, Osawa, Japan); many other solar physics institutes in Europe and USA

Solar–cycle variation of rotation and meridional circulation

L. Gizon in collaboration with M. Rempel (High Altitude Observatory, Boulder, USA); I. González Hernández (National Solar Observatory, Tucson, USA).

SOLARNET

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

SOLID

N.A. Krivova, M. Dasi, S.K. Solanki in collaboration with W. Schmutz, M. Haberreiter, W. Finsterle, C. Wehrli, A. Shapiro, G. Cessateur (Physikalisch-Metorologisches Observatorium, Davos, Switzerland); A. Hauchecorne, G. Thuillier, J.-F. Hochedez (Laboratoire Atmosphères, Milieux, Observations Spatiales, Université de Versailles, Paris, France); T. Dudok de Wit, M. Kretzschmar, M. Schöll (Laboratoire de physique et chimie de l'environnement et de l'espace, Orleans, France); V. Delouille, C. Verbeeck, L. Lefevre, C. Marqué (Royal Observatory of Belgium, Brussels, 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 (Istituto Nazionale di Astrofísica, Osservatorio di Roma, Italy); H. Mason, G. Del Zanna (University of Cambridge, UK); K. Tourpali, S. Misios (Aristotele University Thessaloniki, Greece).

Sources of the Solar Spectral Irradiance Variability

N. Krivova, A. Shapiro, B. Beeck and S. K. Solanki in collaboration with R. Tagirov, W. Ball, W. Schmutz (Physical Meteorological Observatory, Davos, Switzerland); Y. Unruh (Imperial College London, UK); J.S. Morrill (E.O. Hulburt Center for Space Research, Naval Research Laboratory, Washington, USA).

SpaceInn

H. Schunker, L. Gizon, J. Schou, A. Birch, R. Cameron, J. Langfellner, B. Löptien, E. Papini, A. Barekat, M. Nielsen, K. Nagashima, and T. Duvall in collaboration with Kiepenheuer Institut für Sonnenphysik (Freiburg, Germany); Stellar Astrophysics Centre, Universität Aarhus (Denmark); Centro de Astrofísica da Universidade do Porto (Portugal); Commissariat à l'énergie atomique et aux énergies alternatives (France); University of Birmingham (UK); Istituto Nazionale di Astrofísica, Osservatorio Astronomico (Italy); Istituto di Astrofisica e Planetologia Spaziali (Roma, Italy); Laboratoire d'études spatiales et d'instrumentation en astrophysique, Observatoire de Paris (Meudon, France); Instituut voor Sterrenkunde, Katholieke Universiteit Leuven (Belgium); Research Centre for Astronomy and Earth Sciences, Hungarian Academy of Sciences (Budapest, Hungary)

Spectroscopy of asteroids

C. Snodgrass, C. Tubiana, H. Böhnhardt, and J.-B. Vincent in collaboration with S. Protopapa (University of Maryland, College Park, USA); H. Hsieh (Institute for Astronomy, Hawaii, USA); P. Vernazza (European Southern Observatory, 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).

Stellar Astrophysics Centre (SAC)

S. Hekker and E. Guggenberger in collaboration with J. Christensen-Dalsgaard & team (Stellar Astrophysics Centre, Aarhus, Denmark); B. Chaplin, A. Miglio, Y. Elsworth (School of Physics and Astronomy, University of Birmingham, UK); D. Stello, T. Bedding, D. Huber (University of Sydney, Australia).

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, Goddard Space Flight Center (Greenbelt, USA); NASA, Jet Propulsion Laboratory (Pasadena, USA); California Institute of Technology (Pasadena, USA); Los Alamos National Laboratory (Los Alamos, USA); Département de Recherche Spatiale, Observatoire de Paris (Meudon, France); University of Michigan (Ann Arbor, USA); University of Colorado (Boulder, USA); Universität Kiel (Germany); Research Institute for Particle and Nuclear Physics (Budapest, Hungary); Science Applications International Corporation (San Diego, USA); Centre d'Etude Spatiale des Rayonnements (Toulouse, France); European Space Research and Technology Center (Noordwijk, The Netherlands); University of Maryland (College Park, USA); Space Environment Centre, National Oceanic and Atmospheric Administration, (Boulder, USA).

STEREO – Space weather monitor for cosmic rays

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 Processes and their Role in Climate SOLARIS-HEPPA

N. Krivova and 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, Goddard Space Flight Center, Greenbelt, USA); N. Biver, D. Bockelee-Morvan, J. Crovisier (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 (Max-Planck-Institut für Radioastronomie, Bonn, Germany).

SUIT on Aditya-L1

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

SUNRISE

S. K. Solanki, P. Barthol, A. Feller, A. Gandorfer, J. Hirzberger, A. Lagg, L. Gizon, T. Riethmüller, M. van Noort, and T. Wiegelmann in collaboration with José Carlos del Toro Iniesta (Instituto de Astrofísica de Andalucia, Granada, Spain), W. Schmidt (Kiepenheuer-Institut für Sonnenphysik,

Freiburg, Germany), M. Knölker (High Altitude Observatory, National Center for Atmospheric Research, Boulder, USA), V. Martinez-Pillet (National Solar Observatory, Boulder, USA).

Sunspots

A. Lagg, S. K. Solanki, Azaymi Siu, M. van Noort, and D. Bühler in collaboration with Jayant Joshi (Stockholm University, Department of Astronomy, Stockholm, Sweden) and S. Tiwari (NASA Marshall Space Flight Center, Huntsville, USA).

Sunspot statistics using MDI

S.K. Solanki and N.A. Krivova in collaboration with S. Goel (Udaipur Solar Observatory, Udaipur, India).

Suprathermal heavy ions in corotating interaction regions

R.Bučik, U. Mall and A. Korth in collaboration with G. M. Mason (Applied Physics Laboratory, Johns Hopkins University, Laurel, USA).

Surface exploration of Kuiper Belt Objects and Cometary Nuclei

H. Böhnhardt 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 of Helsinki, Finland); C. Olkin (Southwest Research Institute, Boulder, USA); G. P. Tozzi (Istituto Nazionale di Astrofísica, Arcetri Observatory, Florence, Italy); L. Lara (Instituto de Astrofísica de Andalucía, Granada, Spain).

Surface magnetic field effects in local helioseismology

L. Gizon, A.C. Birch, R. Cameron, and H. Schunker in collaboration with D. C. Braun (NorthWest Research Associates, Boulder, USA); P. S. Cally (Monash University, Victoria, Australia).

The Maunder Minimum

S. Solanki and N. Krivova in collaboration with I. Usoskin (University of Oulu, Finland).

TNOs are cool

M. Rengel and P. Hartogh in collaboration with T. Müller (Max-Planck-Institut für extraterrestrische Physik, Garching, Germany); E. Lellouch, A. Barucci, J. Crovisier, A. Delsanti, A. Dorresoundiram, S. Fornasier, D. Hestroffer (Observatoire de Paris, Meudon, France); J. Stansberry, M. Müller, D. Trilling (Northern Arizona University, Flagstaff, USA); E. Dotto (Istituto Nazionale di Astrofísica, Osservatorio Astronomico di Roma, Italy); R. Duffard, P. Gutierres, L. Lara, R. Moreno, J.-L. Ortiz, P. Sanz, A. Thirosin (Instituto de Astrofísica de Andalucía, Granada, Spain); O. Groussin (Laboratoire d'Astrophysique de Marseille, France); O. Hainaut (European Southern Observatory, Garching, Germany); A. Harris (DLR - Institut für Planetenforschung, Berlin, Germany) J. Horner (Open University, Milton Keynes, UK); D. Jewitt, P. Lacerda (University of Hawaii, Honolulu, USA); M. Kidger (European Space Astronomy Centre, Villafranca, Spain); C. Kiss (Konkoly Observatory, Budapest, Hungary); T. Lim, B. Swinyard (Rutherford Appleton Laboratory, Didcot, UK); N. Thomas (Universität Bern, Switzerland).

Tools for Local Helioseismology

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

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

N. Krivova, S. K. Solanki and A.I. Shapiro in collaboration with a European consortium led by T. Dudok de Wit (Université d'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, Sagamihara, 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, 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, UK); T. Widemann (Université de Paris, France).

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

T. Wiegelmann in collaboration with E. K. J. Kilpua (University of Helsinki, Finland); M. S. Madjarska (Armagh Observatory, Ireland); Klaus Galsgaard (Niels Bohr Institute, Copenhagen, Denmark).

Turbulence-Driven Formation of Magnetic Flux Concentrations

J. Warnecke in collaboration with A. Brandenburg, I. Rivero Losada (Nordic Institute for Theoretical Physics, Stockholm University, 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 (Max-Planck-Institut für Kernphysik, Heidelberg, Germany); E. Grün, R. Srama (MPI für Kernphysik, Heidelberg / Hawaii Institute of Geophysics and Planetology, Honolulu, USA); S. F. Dermott, B. A. Gustafson (University of Florida, Gainesville, USA); A. Flandes (Instituto de Geofísica, La Universidad Nacional Autónoma de México, Coyoacán, Mexico); A. L. Graps (Istituto Nazionale di Astrofísica, stituto 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, European Space Operations Centre, Darmstadt, Germany); B. A. Lindblad (Lund Observatory, 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 (Max-Planck-Institut für Extraterrestrische Physik, Garching, Germany); G. Schwehm (European Space Research and Technology Centre, Noordwijk, The Netherlands).

Understanding the Sources of Solar Energetic Particles

R. Bučik in collaboration with E. R. Christian, G. A. De Nolfo (NASA, Goddard Space Flight Center, Greenbelt, MD, USA).

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

A. C. Birch in collaboration with G. Barnes, K.D. Leka, D. Braun (Colorado Research Associates, Boulder, USA); M. Wheatland (University of Sydney, Australia).

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

M. Fränz in collaboration with S. Barabash (PI), R. Lundin (Swedish Institute of Space Physics, Kiruna, Sweden); D. Winningham, R. Frahm (Southwest Research Institute, San Antonio, USA); P. Wurz (Universität Bern, Switzerland); A. Coates (Mullard Space Science Laboratory, Dorking, UK); M. Grande (Rutherford Appleton Laboratory, Didcot, UK); C. C. Curtis (Uinversity of Arizona, Tuscon, USA); J. A. Sauvaud, A. Fedorov (Centre d'Etude Spatiale des Rayonnements, Toulouse, France); E. Kallio (Finnish Meteorological Institute, Helsinki, Finland); S. Orsini (Istituto di Fisica dello Spazio Interplanetario, 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, Technische Universität 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, Tromsö, Norway); U. P. Hoppe (Forsvarets Forskningsinstitutt, Kjeller, Norway); M. Gausa (Arctic Lidar Observatory for Middle Atmosphere Research, Andenes, Norway); U. von Zahn, F. J. Lübken, U. Berger, G. Sonnemann (Fraunhofer-Institut für Angewandte Polymerforschung, Kühlungsborn, Germany); G. Nedoluha, M. Stevens (Naval Research Laboratory,Washington, USA); P. Espy (British Antarctic Survey, Cambridge, UK); Y. Kasai (National Institute of Information and Communications Technology, Tokyo, Japan).

Waves in the solar atmosphere

R. Bučik and G. Gupta in collaboration with D. Banerjee (Indian Institute of Astrophysics, Bangalore, India); G. Stenborg (Interferometrics Incorporated, Hemdon, USA).

2. Vorschläge und Anträge / *Proposals*

2.1 Projektvorschläge / *Project proposals*

Advanced Data-Driven Modelling and Observational Tools for Predicting the Magnetic Structure of Coronal Mass Ejection from Sun to Earth
submitted to European Commission - Horizon 2020; selected
T. Wiegelmann with E. Kilpua (P.I.) (Department of Physics, University of Helsinki, Finland).

Are the Detached Disk Objects evolved or primordial?
submitted to ESO; not selected
H. Böhnhardt with O. Hainaut (European Southern Observatory, Garching, Germany); Protopapa (University of Maryland, College Park, USA).

Astrophysical Processes in the Heliosphere
submitted to BMBF-NRF South Africa; selected
J. Büchner with F. Spanier (Potchefstroom University, South Africa).

Center for Stellar Physics at NYUAD, Abu Dhabi
NYUAD Research Institute; selected
L. Gizon with K. Sreenivasan (President/Dean; New York University Abu Dhabi, Polytechnic School of Engineering, Brooklyn, USA); S. Hanasoge (Tata Institute of Fundamental Resesarch, Mumbai, India).

Constraints for the hydrogen peroxide and water cycle on Mars
submitted to Deutsches SOFIA Institut; selected
P. Hartogh, M. Rengel and C. Jarchow.

Coupling of solar and geomagnetic activity with the spatial distribution of trends in green-house gases in the upper atmosphere
submitted to DFG; selected
P. Hartogh

Develop a coronal model of erupting CME fields
submitted to University of Helsinki; selected
T. Wiegelmann with E. Kilpua (Department of Physics, University of Helsinki, Finland).

Development of spectral unmixing methods based on terrestrial analog materials and their application to remotely sensed multi-/hyperspectral data of planetary regolith surfaces
submitted to DFG; not selected
U. Mall with C. Wöhler (Technische Universität Dortmund, Germany); G. Wörner (Universität Göttingen, Germany).

EuroMoon
submitted to ISSI; selected
U. Mall with P. Pinet (Institut de Recherche en Astrophysique et Planétologie, Toulouse, France); H. Hiesinger (Universität Münster, Germany); A. Spuchon (Space Exploration Institute, Neuchatel, Switzerland); J. Huovelin (Helsinki University, Finland); D. Lawrance (Applied Physics Laboratory, Johns Hopkins University, Laurel, USA); C. Peters (Brown University, Rhode Island, USA).

Europlanet 2020
submitted to European Commission - Horizon 2020; selected
N. Krupp and W. Goetz with about 60 institutions active in planetary and space research from across Europe

Evolution of Magnetic Free Energy, Current Helicity and Magnetic Helicity in association with Solar Eruptions
submitted to NSF (SHINE), not selected

T. Wiegelmann with J. Jing (New Jersey Institute of Technology, Newark, USA).

From solar to stellar magnetic eruptions
submitted to DFG; pending
J. Büchner.

Getting Ready for EST (GREST)
submitted to European Commission - Horizon 2020; selected
M. van Noort and Alex Feller with Manolo Collados (Instituto de Astrofísica de Canarias, La Laguna, Tenerife, Spain) and several other European solar physics instututes

Investigation of geomagnetic influences on the vertical coupling by gravity waves in the thermosphere/ionosphere
submitted to DFG; selected
P. Hartogh

Investigation of the decay of sunspots and sunspot groups
submitted to DAAD; pending
N. Krivova with J. Muraközy (Heliophysical Observatory of the Research Centre for Astronomy and Earth Sciences, Debrecen, Hungary).

Ionospheric outflow using EISCAT
Norwegian Academy of Science and Letters; selected
S. Haaland with C. Johnsen (University of Oslo, Norway); L. Maes (Belgian Institute of Aeronomy, Brussels,Belgium).

Linking the consequences of micro-scale turbulence to macro-scales
submitted to DFG; pending
J. Büchner with U. Motschmann (Technische Universität Braunschweig, Germany)

MIRS – A Map of the Ice Regions in the Solar System
submitted to ESA; not selected
U. Mall, J. Agrawal, T. Albin, and R. Orlik with N. Kappelmann, K. Werner (Institut für Astronomie und Astrophysik, Universität Tübingen, Germany); S. Mardaneh (Institut für Raumfahrtsysteme, Universität Stuttgart, Germany).

Modeling the short time dynamics of the Earth's outer core velocity and magnetic fields
submitted to DFG; selected
J. Wicht with M. Holschneider (Institut für Mathematik, Universität Potsdam, Germany).

Multi-layered modeling of active regions toward predicting flaring activity
submitted to ISSI; not selected
T. Wiegelmann with G.D. Fleishman (New Jersey Institute of Technology, Newark, USA).

NLTE calculations of solar atmosphere with local ALI operator in comoving frame of reference (COST TOSCA Short-term scientific stay)
submitted to COST TOSCA; not selected
N. Krivova with R. Tagirov (World Radiation Center, Physikalisch-Metorologisches Observatorium Davos, Switzerland).

Nonlinear Force-free Field Modeling of 3-D Magnetic Fields in Solar Corona and the Linkage to the Bz in Interplanetary Magnetic Clouds
submitted to NASA, not selected
T. Wiegelmann with J. Jing (New Jersey Institute of Technology, Newark USA).

Origin of 3He-rich Solar Energetic Particles (BU 3115/1-1)
submitted to DFG, not selected
R. Bučik, D. E. Innes and N.-H. Chen.

Planets beyond the main sequence: theory and observation

submitted to DFG; not selected
S. Schuh with H. Perets (Technion, Israel Institute of Technology, Haifa, Israel); D. Schleicher (Institut für Astrophysik, Universität Göttingen, Germany).

Predicting and Understanding the Longitudinal Spread of solar Energetic particles (PULSE)
submitted to NASA; not selected
T. Wiegelmann with N. Lugaz (Space Science Center, University of New Hampshire, Durham, USA).

Project Phase A for "Arts and Science in Motion"
Volkswagen Foundation; selected
M. Rengel.

Radial evolution of heliospheric plasma turbulence on fluid-ion-electron triple scales
submitted to DFG; pending
J.Büchner with U. Motschmann (Technische Universität Braunschweig, Germany),Y. Narita (Universität Graz, Austria).

Search for OI in the atmosphere of Mars
submitted to Deutsches SOFIA Institut; selected
P. Hartogh, C. Jarchow, and L. Rezac.

Solar Radiation and Structure
submitted to IAU, pending
N. Krivova with G. Cauzzi (Istituto Nazionale di Astrofísica, Osservatorio Astrofisico di Arcetri, Firenze, Italy); A. Kosovichev, W.W.Hansen (Experimental Physics Laboratory, Stanford University, USA); N. Shchukina (Main Astronomical Observatory, Solar Physics Department, Kyiv, Ukraine).

Study of the validity of the SFTM and SATIRE models implementing cosmogenic radio nuclide data (COST TOSCA Short-term scientific stay)
submitted to COST TOSCA; selected
N. Krivova with E. Asvestari (Univeristy of Oulu, Finland).

Towards understanding the slow solar wind: Coupling transient activity from the Sun to the Heliosphere
submitted to ISSI; not selected
T. Wiegelmann with E. Kilpua (Department of Physics, University of Helsinki, Finland), M. Madjarska (Armagh Observatory, College Hill, N. Ireland).

Understanding Stratospheric Ozone evolution caused by solar irradiance VAriability (SOVA)
submitted to Humboldt foundation; pending
N. Krivova with A. V. Shapiro (World Radiation Center, Physikalisch-Metorologisches Observatorium Davos, Switzerland).

2.2 Anträge auf Beobachtungszeit / *Observing time proposals*

A Magnitude Limited Survey of the Rotational Properties of Kuiper Belt Objects
submitted to ESO; selected
P. Lacerda, R. Kokotanekova and S. Lorek with M. Lockhart and B. Davidsson (Uppsala University, Sweden); N. Peixinho (University of Antofagasta, Chile); A. Thirouin (Lowell Observatory, Flagstaff, USA); B. Carry (Observatoire de Nice, France); M. Wyatt (Cambridge University, UK); S. Fornasier (Observatoire de Paris, France); C. Snodgrass (Open University, Milton Keynes, UK); O. Hainaut (European Southern Observatory, Garching, Germany).

High-precision photometry of TU UMa
submitted to Fairborn Observatory, Arizona; selected

E. Guggenberger with G. Handler (Nicolaus Copernicus Astronomical Center, Warsaw, Poland).

Investigations of Possible Binary RR Lyrae Variables
submitted to Mc Donald Observatory; selected
E. Guggenberger with T. Barnes (McDonald Observatory, University of Texas, Austin, USA); K. Kolenberg (Harvard Smithsonian Center for Astrophysics, Cambridge, USA)

Observing Time Proposal for the Vacuum Tower Telescope
submitted to Observatorio del Teide, Tenerife, Spain; selected
A. Feller, N. Krishnappa, F. Iglesias, and A. Lagg.

Planetary companions to sdB stars
submitted to ESO La Silla; not selected
S. Schuh with R. Silvotti (PI) (Istituto Nazionale di Astrofísica, Torino, Italy); R. Ostensen (Institute of Astronomy, Katholieke Universiteit Leuven, Belgium); J. Telting (Nordic Optical Telescope, La Palma, Spain).

Probing the stellar source of the internal pollution in globular clusters: the lithium test
submitted to VLT; selected
G. Angelou with V. D'Orazi, Raffaele Gratton, S. Lucatello, Y. Momany (Osservatorio Astronomico di Padova, Italy), E. Carretta, A. Bragaglia (Istituto Nazionale di Astrofísica, Osservatorio Astronomico di Bologna, Italy), J. Lattanzio (Monash Centre for Astrophysics, Monash University, Melbourne, Australia).

Study of the inverse Evershed effect in the transition region and chromosphere above a sunspot (Observing time with SUMER and IRIS)
submitted to IRIS and SUMER PIs; selected
L. Teriaca

The sungrazing comet C/2012 S1 (ISON) after its perihelion passage within the solar corona
submitted to Calar Alto Observatory; selected
H. Böhnhardt with L. Lara (Instituto de Astrofísica de Andalucía, Granada, Spain).

2.3 Anträge auf Rechenzeit / *Computing time proposals*

Coronal ejections from self-consistent MHD simulations
submitted to CSC, Finnland; selected
J. Warnecke with Petri J. Käpylä (Helsinki University, Finland).

3. Publikationen / *Publications*

3.1 Referierte Publikationen / *Refereed publications*

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

M. Andriopoulou, **E. Roussos**, **N. Krupp**, C. Paranicas, M. Thomsen, S. Krimigis, M. Dougherty, and **K.-H. Glassmeier**, Spatial and Temporal Dependence of the Convective Electric field in Saturn's Inner Magnetosphere, *Icarus*, **229**, 57–70, doi:10.1016/j.icarus.2013.10.028, 2014.

L. S. Anusha, K. N. Nagendra, and H. Uitenbroek, Effect of Cross-Redistribution on the Resonance Scattring Polarization of O-I Line at 1302 Angstrom, *Astrophys.J.*, **794** (1), 17, doi: 10.1088/0004637X/7947, 2014.

M. Arik, S. Aune, K. Barth, A. Belov, S. Borghi, H. Brauninger, G. Cantatore, J. M. Carmona, S. A. Cetin, J. I. Collar, E. Da Riva, T. Dafni, M. Davenport, C. Eleftheriadis, N. Elias, G. Fanourakis, E. Ferrer-Ribas, P. Friedrich, J. Galan, J. A. Garcia, A. Gardikiotis, J. G. Garza, E. N. Gazis, T. Geralis, E. Georgiopoulou, I. Giomataris, S. Gninenko, H. Gomez, M. G. Marzoa, E. Gruber, T. Guthorl, R. Hartmann, S. Hauf, F. Haug, M. D. Hasinoff, D. H. H. Hoffmann, F. J. Iguaz, I. G. Irastorza, J. Jacoby, K. Jakovcic, M. Karuza, K. Konigsmann, R. Kotthaus, M. Krcmar, M. Kuster, B. Lakic, P. M. Lang, J. M. Laurent, A. Liolios, A. Ljubicic, G. Luzon, S. Neff, T. Niinikoski, A. Nordt, T. Papaevangelou, M. J. Pivovaroff, G. Raffelt, H. Riege, A. Rodriguez, M. Rosu, J. Ruz, I. Savvidis, I. Shilon, P. S. Silva, **S. K. Solanki**, L. Stewart, A. Tomas, M. Tsagri, K. van Bibber, T. Vafeiadis, J. Villar, and J. K. Vogel, Search for Solar Axions by the CERN Axion Solar Telescope with He-3 Buffer Gas: Closing the Hot Dark Matter Gap, *Phys. Rev. Lett.,* **112** (9), 091302, doi: 10.1103/PhysRevLett.112.091302, 2014.

C. Arridge, N. Achilleos, **J. Agarwal**, C. B. Agnor, R. Ambrosi, N. André, S. V. Badman, K. Baines, D. Banfield, M. Barthelemy, M. M. Bisi, J. Blum, P. Brandt, P. Briand, C. Briois, S. M. Brooks, J. C. Castillo-Rogez, **T. Cavalié**, B. Christophe, A. J. Coates, G. Collinson, J. F. Cooper, M. Costa-Sitja, R. Courtin, I. A. Daglis, I. de Pater, M. Desai, D. Dirkx, M. K. Dougherty, R. W. Ebert, G. Filaccione, L. N. Fletcher, J. Fortney, I. Gerth, D. Grassi, D. Grodent, E. Gruen, J. Gustin, M. M. Hedman, R. Helled, P. Henri, S. Hess, J. Hillier, G. Hospodarsky, S. Hsu, P. Irwin, C. M. Jackman, O. Karatekin, S. Kempf, E. Khalisi, K. Konstantinidis, **H. Krüger**, W. S. Kurth, C. Labrianidis, V. Lainey, L. L. Lamy, M. Laneuville, D. Lucchesi, A. Luntzer, J. MacArthur, A. Maier, A. Masters, S. McKenna-Lawlor, H. Melin, A. Milillo, G. Moragas-Klostermeyer, A. Morschhauser, J. J. Moses, O. Mousis, N. Nettelmann, F. M. Neubauer, T. A. Nordheim, B. Noyelles, G. S. Orton, M. Owens, R. Peron, C. Plainiki, F. Postberg, N. Rambaux, K. D. Retherford, S. Reynaud, **E. Roussos**, C. T. Russell, A. M. Rymer, R. Sallantin, A. Sanchez-Lavega, O. Santolik, J. Saur, K. M. Sayanagi, P. Schenk, J. Schubert, N. Sergis, E. C. Sittler, A. Smith, R. Spahn, F.and Srama, T. Stallard, V. J. Sterken, Z. Sternovsky, M. Tiscareno, G. Tobie, F. Tosi, M. Trieloff, D. Turrini, E. Turtle, S. Vinatier, R. J. Wilson, and P. Zarka, The Science Case for an Orbital Mission to Uranus: Exploring the Origins and Evolution of Ice Giant Planets, *Planet. Space Sci.*, **104** (SI), 122–140, doi:10.1016/j.pss.2014.08.009, 2014.

W. Ball and **L. Gizon**, A New Correction of Stellar Oscillation Frequencies for Near-surface Effects, *Astron. & Astrophys.*, **568**, A123, doi:10.1051/0004-6361/201424325, 2014.

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G. Barnes, **A. C. Birch**, K. D. Leka, and D. C. Braun, Helioseismology of Pre-emerging Active Regions. III. Statistical Analysis, *Astrophys. J.*, **19**, doi:10.1088/0004-637X/786/1/19, 2014.

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D. Bodewits, **J.-B. Vincent**, and M. S. P. Kelley, Scheilas Scar: Direct Evidence of Impact Surface Alteration on a Primitive Asteroid, *Icarus*, **229**, 190–195, doi:10.1016/j.icarus.2013.11.003, 2014.

H. Böhnhardt, D. Schulz, S. Protopapa, and C. Götz, Photometry of Transneptunian Objects for the Herschel Key Program `TNOs are Cool', *Earth, Moon, and Planets*, **114**, 35–57, doi:10.1007/s11038-014-9450-x, 2014.

J. M. Borrero, B. W. Lites, **A. Lagg**, R. Rezaei, M. Rempel, Comparison of Inversion Codes for Polarized Line Formation in MHD Simulations I. Milne-Eddington Codes, *Astron. & Astrophys.*, **572**, A54, doi**:** 10.1051/0004-6361/201424584, 2014.

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P.-A. Bourdin, S. Bingert, and **H. Peter,** Coronal Loops above an Active Region: Observation versus Model, *Pub. Astron. Soc. Japan*, **66** (S.I. 1), S7, doi: 10.1093/pasj/psu123, 2014.

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3.2 Doktorarbeiten / *PhD theses*

Ajitha Sethunadh, Jisesh, Three-dimensional modeling of the stratospheres of gas giants, Drei-dimensionale Modellierung der Stratosphäre der Gas Giganten, Technische Universität Berlin, 2014.

Andriopoulou, Maria, Energetic charged particle kinematics in Saturn's inner magnetosphere, Technische Universität Braunschweig, 2014.

Beeck, Benjamin, Simulations of magnetoconvection in cool stars, Georg-August Universität Göttingen, Germany, 2014.

Duarte, Lúcia Dias de Vasconcelos, Dynamics and Magnetic Field Generation in Jupiter and Saturn, Dynamik und Magnetfelderzeugung in Jupiter und Saturn, Technische Universität Braunschweig, 2014.

Giri, Chaitanya, La composition organique d'un noyau cométaire, l'instrument COSAC sur la sonde Philae, Die organische Zusammensetzung des Kometenkerns, das COSAC-Experiment auf Philae, Université de Nice - Sophia Antipolis, 2014.

Hofmann, Marc, Dynamics of Granular Material on Small Bodies, Technische Universität Braunschweig, 2014.

Joshi, Jayant, Magnetic and velocity field of sunspots in photosphere and upper chromosphere, Technische Universität Braunschweig, 2014.

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4. Vorträge und Poster / *Talks and posters*

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M. André, **K. Li**, A. I. E. Eriksson, H. Nilsson, and **S. Haaland**, *Outflow of low-energy ions and the solar cycle,* Geospace Revisited: a Cluster/MAARBLE/V, an Allen Probes Conference, Rhodes, Greece, Sep. 15–20, 2014 (invited talk).

I. Apathy, **M. Hilchenbach**, A. Remizov, H.-U. Auster, and G. Berghofer, *Envisaged plasma and magnetic field measurements onboard the Rosetta Lander Philae on comet 67P/Churyumov-Gerasimenko*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

W. Ball, J. Haigh, **N. Krivova**, Y. Unruh, and **S. Solanki**, *The SATIRE-S model and why getting solar cycle spectral irradiance trends correct is so important*, EGU General Assembly 2014, Vienna, Austria, April, 2014 (oral).

W. T. Ball, **N. A. Krivova**, **S. K. Solanki**, Y. C. Unruh, J. D. Haigh, D. Mortlock, A. Jaffe, J. Egerton, and J. Harder, *Our current understanding of solar irradiance and its effect on stratospheric ozone*, Seminar, PMOD/WRC, Davos, Switzerland, June, 2014 (invited talk).

W. T. Ball, **N. A. Krivova**, **S. K. Solanki**, Y. C. Unruh, J. D. Haigh, D. Mortlock, A. Jaffe, J. Egerton, and J. Harder, *Solar irradiance and Stratospheric ozone*, Seminar, University of Montreal, Canada, January, 2014 (invited talk).

W. T. Ball, **N. A. Krivova**, **S. K. Solanki**, Y. C. Unruh, J. D. Haigh, D. Mortlock, A. Jaffe, J. Egerton, and J. Harder, *Spectral solar irradiance and the limits in understanding the effect of irradiance on stratospheric ozone*, seminar, Cambridge University, UK, June, 2014 (invited talk).

W. T. Ball, Y. C. Unruh, J. D. Haigh, D. Mortlock, A. Jaffe, **K.-L. Yeo**, **N. A. Krivova**, **S. Solanki**, **K. H. Glassmeier**, and T. Wenzler, *SATIRE-S: Updates*, Workshop, ISSI, Bern, Switzerland, May, 2014 (invited talk).

W. T. Ball, **K. L. Yeo**, **N. A. Krivova**, **S. K. Solanki**, Y. C. Unruh, J. D. Haigh, D. Mortlock, and J. S. Egerton, *Spectral solar irradiance and limits on understanding the effect on stratospheric ozone*, seminar, GEOMAR, Kiel, Germany, October, 2014 (invited talk).

S. Barabash, M. Holmsrtom, Y. Futaana, A. Fedorov, R. Frahm, **M. Fränz**, and **E. Dubinin**, *Phobos-solar wind interaction: Results from Mars Express for the closest-ever fly-by*, European Geosciences Union General Assembly, Vienna, Austria, Apr 27-May 2, 2014 (oral).

A. Bardyn, C. Briois, H. Cottin, N. Fray, L. LeRoy, L. Thirkell, and **M. Hilchenbach**, *Rosetta/COSIMA: Laboratory time-of-flight secondary ion mass spectra of PAHs for in-situ detection in the cometary solid organic matter*, Asteroids, Comets, Meteors, Helsinki, Finland, June 30 - July 4, 2014 (poster).

A. Barekat, *The radial gradient of the near-surface shear layer of the Sun*, MHD-Days 2014, Potsdam, Germany, December 3, 2014 (oral).

A. Barekat, *The radial gradient of the near-surface shear layer of the Sun*, HELAS VI / SOHO 28/ SPACEINN, Göttingen , Germany, September 1, 2014 (oral).

S. Barra, **T. Wiegelmann**, and H. Fichtner, *Coronal active region modelling based on SDO data*, DPG Spring Meeting 2014, Berlin, March 17-21, 2014 (oral).

M. Barta, **J. Büchner**, M. Karlicky, and **J. Skala**, *Role of plasmoids in energy cascade in magnetic reconnection in solar corona*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (invited talk).

A. Bazilevskiy, N. Ignatiev, **W. Markiewicz**, J. Head, D. Titov, and **E. V. Shalygin**, *Volcanism of Venus: Insights from the VMC data analysis*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

E. Becker, M. Grygalashvyly, G. Sonnemann, **P. Hartogh**, and **C. Jarchow**, *GWS mixing and effective diffusivity concept for minor chemical constituents in the MLT*, 11th Annual, Meeting Asia Oceania Geosciences Society, Sapporo, Japan, 28 July - 01 August, 2014 (oral).

B. Beeck, **M. Schüssler**, **R. Cameron**, and A. Reiners, *MHD simulations of surface convection in cool main-sequence stars,* Cool Stars 18, Flagstaff, AZ, USA, June 9-13, 2014 (poster).

N. Biver, D. Bockelée-Morvan, **P. Hartogh**, J. Crovisier and M. de Val-Borro, M. Kidger, M. Küppers, D. Lis, R. Moreno, S. Szutowicz, and H. Team, *Observations of ammonia in comets with Herschel*, Asteroids, Comets, Meteors 2014, Helsinki, Finnland, June 30 - July 4, 2014.

D. Bockelee-Morvan, N. Biver, C. Opitom, D. Hutsemekers, J. Crovisier, E. Jehin, **P. Hartogh**, S. Szutowizc, E. Lellouch, M. Kidger, B. Vandenbussche, V. Zakharov, and H. Team, Water, hydrogen cyanide, and dust production from the distant comet 29P/Schwassmann-Wachmann 1, Asteroids, Comets, Meteors 2014, Helsinki, Finnland, June 30 - July 4, 2014 (oral).

H. Böhnhardt, *Castalia - A European Mission to a Main Belt Comet,* Seminar Institute for Extraterrestrial Physics and Geophysics, Technical University, Braunschweig, May 13, 2014 (oral).

H. Böhnhardt, *Living with the Rosetta Lander - Exploring a comet with Philae*, Rosetta Mini-Symposium, Academy of Sciences of the Netherlands, Amsterdam, May 27, 2014 (oral).

H. Böhnhardt, J.-P. Bibring, and the Philae Team, *The Philae Science Mission A Preview*, EPSC Conference, Lisboa, Sep. 08-12, 2014 (oral).

H. Böhnhardt, **W. Curdt**, **B. Inhester**, L. Lara, **N. Oklay**, **B. Podlipnik**, **C. Snodgrass**, **C. Tubiana**, and **J. Vincent**, *Comet ISON from cradle to grave*, Asteroids, Comets, Meteors 2014, Helsinki, June 30 - July 04, 2014 (poster).

H. Böhnhardt and the Castalia Study Science Team, *Castalia a European Mission to a main-belt comet*, Asteroids, Comets, Meteors, Helsinki, June 30 - July 04, 2014 (oral).

B. P. Bonev, M. J. Mumma, G. L. Villanueva, M. A. DiSanti, **H. Böhnhardt**, L. Paganini, M. Lippi, and E. L. Gibb, *Ethane (C2H6), Methane (CH4), and Carbon Monoxide (CO) in the Coma of Comet C/2006 W3 (Christensen) Beyond 3.2 AU from the Sun*, DPS Meeting 45, Tucson, November 9-14, 2014, #413.18 (oral).

C. Briois, D. Baklouti, , H. Cottin, C. Engrand, H. Fischer, N. Fray, M. Godard, **M. Hilchenbach**, H. von Hörner, H. Höfner, K. Hornung, J. Kissel, Y. Langevin, L. Le Roy, H. Lehto, K. Lehto, **S. Merouane**, F. R. Orthous-Daunay, C. Revillet, J. Rynö, R. Schulz, J. Silen, S. Siljeström, and L. Thirkell, *Measuring Organic Matter with COSIMA on Board Rosetta*, AGU Fall Meeting, San Francisco, CA, US, Dec 15-19, 2014 (poster).

J. Büchner, *Collisionless reconnection in the solar corona, International E. Parker* Workshop on magnetic reconnection, São Jose dos Campos, March 13, 2014 (invited lecture).

J. Büchner, *ILWS activities in Germany*, International Committee "Living with a star", Moscow, Russia, August 2, 2014 (invited talk).

J. Büchner, *Influence of turbulence on reconnection by SGS MHD models and their calibration on plasma models beyond MHD: Hybrid and PIC code kinetic simulations*, Max-Planck-Princeton Center for Plasma Physics Annual Meeting, Berlin, Germany, June 29, 2014.

J. Büchner, *Microscale routing of magnetic reconnection in the solar corona,* ESF Workshop on Reconnection Events in Fluids, Glasgow, UK, May 19, 2014 (invited lecture).

J. Büchner, *Models and Numerical Simulation of Solar eruptions,* X COLAGE, 10th International Latino-American meeting, Cusco, Peru, September 12, 2014 (invited talk).

J. Büchner, *Models of Solar eruptions, International J. Heyvaerts Symposium on Magnetic fields from the Sun to Black Holes*, Paris, France, November 19, 2014 (invited lecture).

J. Büchner, *Non-linear kinetic instabilities of current sheets*, X COLAGE, 10th International Latino-American meeting, Cusco, Peru, September 13, 2014 (oral).

J. Büchner, *Numerical simulation of Space plasmas,* SCOSTEP International School on Space Plasma Simulation, Lima, Peru, September 15, 2014 (invited keynote lecture).

J. Büchner, *Sub-Grid-Scale (SGS) Approach to the Turbulent Dynamo and Magnetic Reconnection*, Zeldovich-100, International Astrophysical Conference, Moscow, Russia, June 19, 2014, (invited lecture).

R. Bučik, *The origin of impulsive solar flare energetic ions*, Meeting of the Evaluation Committee of the Program SASPRO, Bratislava, Slovakia, Nov 19-21, 2014, (invited talk).

R. Bučik, **D. E. Innes**, and G. M. Mason, *Persistent energetic ion outbursts from the Sun*, AGU Fall Meeting, San Francisco, USA, Dec 15-19, 2014 (poster).

T. Cavalié, V. Hue, **P. Hartogh**, E. Lellouch, T. Cassidy, M. Dobrijevic, **C. Jarchow**, and R. Moreno, *Is Enceladus Saturn's source of water?*, European Planetary Science Congress 2014, Cascais, Portugal, September 7-12, 2014.

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. González, T. Greathouse, **C. Jarchow**, M. Kidger, L. M. Lara, **M. Rengel**, G. Orton, H. Sagawa, and **M. de Val-Borro**, *The origin of external oxygen in Jupiter and Saturn's environments*, Semaine de l'Astrophysique Francaise, Paris, June 3-6, 2014.

T. Cavalié, O. Venot, F. Selsis, F. Hersant, and **P. Hartogh**, *The Deep O/H Ratio in Uranus and Neptune from CO Spectroscopy and Thermochemical Modeling*, Workshop on the Study of the Ice Giant Planets, Laurel, Maryland, July 28-30, 2014.

F. Chen, **H. Peter**, and **S. Bingert**, *Magnetic Field Lines and Coronal Loops A Difficult Relation*, 2014 Living With a Star / Iris / Hinode Meeting, Portland, US, Nov.3-6, 2014 (oral).

F. Chen, **H. Peter**, **S. Bingert**, and M. C. M. Cheung, *Magnetic field lines and coronal loops*, 14th European Solar Physics Meeting, Dublin, Ireland, 2014.

N.-H. Chen, **R. Bučik**, **D. E. Innes**, and G. M. Mason, *The relation between solar jets and 3He-rich solar energetic particle events at 1 AU*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (poster).

U. R. Christensen, *An iron snow dynamo in Ganymede's core*, Conference on the Dynamics of Planetary and Stellar Interiors, San Diego, July 30, 2014 (oral).

U. R. Christensen, *Dynamo models: from planets to stars*, Geophysical and Astrophysical Flows and Dynamos, Newcastle, UK, August 29, 2014 (oral).

U. R. Christensen, *Magnetic fields a window into the deep interiors of planets*. Workshop on Structure and Dynamics of the interior of rocky planets, Structure and Dynamics of Earth-like Planets, College de France, Paris, 2014 (oral).

U. R. Christensen, *Saturn's magnetic field and dynamo*, Saturn Science Conference, Madison, WI, USA, August 4, 2014 (oral).

W. Curdt, **H. Böhnhardt**, **U. Schühle**, **S. Solanki**, **L. Teriaca**, and **J.-B. Vincent**, *Scattered Lyman-alpha radiation of comet 2012/S1 (ISON) observed by SUMER/SOHO*, Asteroids, Comets, Meteors, Helsinki, June 30 - July 04, 2014 (oral).

W. Curdt, **H. Böhnhardt**, **J.-B. Vincent**, **S. Solanki**, **L. Teriaca**, and **U. Schühle**, *SUMER observations of comet 2012/S1 during perihelion*, DPG Frühjahrstagung, Berlin, March 17-21, 2014 (poster).

W. Curdt, **H. Böhnhardt**, **J.-B. Vincent**, **S. Solanki**, **L. Teriaka**, and **U. Schühle**, *SUMER observations of comet 2012/S1 during perihelion*, XIIIth Hvar Astrophysical Colloquium "Physics of the solar atmosphere", Hvar, Croatia, September 22-26, 2014 (poster).

W. Curdt and B. Fleck, *Solar and galactic cosmic rays observed by SOHO*, XIIIth Hvar Astrophysical Colloquium "Physics of the solar atmosphere", Hvar, Croatia, September 22-26, 2014 (oral).

P. W. Daly, *Long-term analysis of cosmic ray background seen by the RAPID electron detector on Cluster*, Geospace Revisited: a Cluster/MAARBLE/Van Allen Probes Conference, Rhodes, Greece, Sep. 15–20, 2014 (oral).

P. W. Daly, *Status report of the RAPID instrument on board Cluster*, Geospace Revisited: a Cluster/MAARBLE/Van Allen Probes Conference, Rhodes, Greece, Sep. 15–20, 2014 (oral).

M. Dasi-Espuig, Y. Unruh, **N. A. Krivova**, **S. K. Solanki**, and J. Jiang, *Modeling of spectral irradiance based on modeled proxies*, SOLID annual meeting, Bremen, Germany, 28-31 October, 2014 (oral)

M. Dasi-Espuig, J. Jiang, **N. A. Krivova**, and **S. K. Solanki**, *Modelling total solar irradiance using a flux transport mode*l, EGU, Vienna, Austria, 27 April - 2 May, 2014 (invited talk).

M. Dasi-Espuig, J. Jiang, **N. A. Krivova**, and **S. K. Solanki**, *Total solar irradiance reconstruction since 1700 using a flux transport model*, 40th COSPAR Scientific Assembly, Moscow, Russia, 2-10 August, 2014 (poster).

J. Deller, S. Lowry, **C. Snodgrass**, M. Price, and **H. Sierks**, *Impact Simulations on the Rubble Pile Asteroid (2867) Steins*, DPS, Tucson, AZ, Nov 9-14, 2014 (oral).

M. de Val-Borro, D. Bockelée-Morvan, E. Jehin, **P. Hartogh**, C. Opitom, S. Szutowicz, N. Biver, J. Crovisier, D. Lis, **L. Rezac**, T. de Graauw, D. Hutsemékers, **C. Jarchow**, M. R. Kidger, M. Küppers, L. M. Lara, J. Manfroid, **M. Rengel**, B. M. Swinyard, D. Teyssier, B. Vandenbussche, and C. Waelkens, *Distant activity of comet C/2006 W3 (Christensen) as observed with Herschel*, Asteroids, Comets, Meteors 2014, Helsinki, Finnland, June 30 - July 4, 2014.

M. de Val-Borro, M. Küppers, **P. Hartogh**, **L. Rezac**, N. Biver, D. Bockelée-Morvan, J. Crovisier, **C. Jarchow**, and G. Villanueva, *Volatile composition and activity of comets C/2001 Q4 (NEAT) and C/2002 T7 (LINEAR)*, Asteroids, Comets, Meteors 2014, Helsinki, Finland, June 30 - July 4, 2014.

E. Dubinin, **M. Fränz**, C. Mazelle, and S. Barabash, *Large-amplitude coherent structures in plasma near Mars*, The 5th Moscow Solar System Symposium (5M-S3), Moscow, Russia, October 13-18, 2014 (oral).

E. Dubinin, **M. Fränz**, T.-L. Zhang, **J. Woch,** and **Y. Wei**, *Ionospheric magnetic fields and currents at Venus and Mars*, European Geosciences Union General Assembly, Vienna, Austria, Apr 27-May 2, 2014 (oral).

E. Dubinin, **M. Fränz**, T.-L. Zhang, **J. Woch**, and **Y. Wei**, *Ionospheric magnetic fields at Venus and Mars and their effect on plasma flow in the near planet wakes*, EPSC, Estotil, Portugal, September, 7-12, 2014 (oral).

E. Dubinin, **M. Fränz**, T.-L. Zhang, **J. Woch**, **Y. Wei**, and S. Barabash, *Asymmetrical response of the ionospheric magnetization and the plasma sheet formation on the IMF orientation*, 6th Alfven Conference: Plasma Interactions with Solar System Objects anticipating Rosetta, MAVEN and Mars Orbiter Mission, London, UK, July 7-11, 2014 (oral).

C. Engrand, D. Baklouti, H. Briois, H. Cottin, H. Fischer, N. Fray, M. Godard, H. Henkel, **M. Hilchenbach**, K. Hornung, J. Kissel, A. Koch, Y. Langevin, H. Lehto, **S. Merouane**, F. R. Orthous-Daunay, J. Rynö, R. Schulz, J. Silen, S. Siljeström, T. Stephan, L. Thirkell, and K. Varmuza, *On the Inorganic Composition of Cometary Dust from Comet 67P/Churyumov-Gerasimenko, as Seen by COSIMA on Board ROSETTA*, AGU Fall Meeting, San Francisco, CA, US, Dec 15-19, 2014 (poster).

C. P. Escoubet, B. Grison, E. J. Berchem, K. J. Trattner, B. Lavand, F. Pitou, R. Richard, M. G. G. T. Taylor, H. Laakso, A. Masson, M. Dunlop, I. Dandouras, H. Rème, A. Fazakerley, and **P. Daly**, *Particle injections near the exterior cusp observed by Cluster*, Geospace Revisited: a Cluster/MAARBLE/Van Allen Probes Conference, Rhodes, Greece, Sep. 15–20, 2014 (poster).

A. Feller, *Fast Solar Polarimeter*, CASSDA - SOLARNET Workshop, Freiburg, February 19, 2014 (oral).

A. Feller, *Stray light contamination*, CASSDA - SOLARNET Workshop, Freiburg, February 19, 2014 (oral).

A. Feller, **F. A. Iglesias**, **K. Nagaraju**, **S. K. Solanki**, and J. Treis, *Fast Solar Polarimeter*, IAU Symposium 305 - From the Sun to Stars and Stellar Environments, Punta Leona, Costa Rica, December, 2, 2014 (oral).

L. Feng, **B. Inhester**, and W. Gan, *3D reconstructions of CMEs from SECCHI COR and HI1 data and their link to in-situ observations*, Solar Information Workshop 7, Belgium, August 18-21, 2014 (oral).

L. Feng, **B. Inhester**, and W. Gan, *Kelvin-Helmholtz Instability of a Coronal Streamer*, European Solar Physics Meeting 14, Ireland, September 8-12, 2014 (poster).

L. Feng, **B. Inhester**, Y. Wang, F. Shen, C. Shen, and W. Gan, *On the mass evolution of CMEs*, European Solar Physics Meeting 14, Ireland, September 8-12, 2014 (oral).

M. Focardi, G. Capobianco, V. Andretta, C. Sasso, M. Romoli, F. Landini, S. Fineschi, M. Pancrazzi, A. Bemporad, G. Nicolini, S. Pucci, M. Uslenghi, G. Naletto, P. Nicolosi, D. Spadaro, **L. Teriaca**, **U. Schühle**, and E. Antonucci, *In-flight UV and polarized-VL radiometric calibrations of the solar orbiter/METIS imaging coronagraph*, Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray, Montreal, June 22, 2014 (oral).

M. Forster and **S. E. Haaland**, *High-latitude ionospheric convection from Cluster EDI revisited: interhemispheric differences and solar cycle effects*, Geospace Revisited: a Cluster/MAARBLE/Van Allen Probes Conference, Rhodes, Greece, Sep. 15–20, 2014 (poster).

M. Fränz, **E. Dubinin**, D. Andrews, H. Nilsson, and A. Fedorov, *Cold ion escape from the Martian ionosphere*, European Geosciences Union General Assembly, Vienna, Austria, Apr 27-May 2, 2014 (poster).

M. Fränz, **N. Krupp**, **E. Roussos**, and X.-D. Wang, *Plasma Energization in the Jovian System*, European Planetary Science Congress EPSC, Cascais, Portugal, 7-12 Sep, 2014 (oral).

N. Fray, A. Bardyn, C. Briois, H. Cottin, C. Engrand, L. Le Roy, S. Siljeström, L. Thirkell, K. Varmuza, 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, Cascais, Portugal, Sep 7-12, 2014 (oral).

Y. Futaana, S. Barabash, X.-D. Wang, M. Wieser, G. S. Wieser, P. Wurz, **N. Krupp**, and P. C. Brandt, *Low-Energy Energetic Neutral Atom Imaging of Io Plasma and Neutral Tori*, European Geosciences Union General Assembly, Vienna, Austria, Apr 27-May 2, 2014 (oral).

S. Gissot, A. BenMoussa, B. Giordanengo, A. Soltani, T. Saito, **U. Schühle**, U. Kroth, and A. Gottwald, *Design and Radiation Hardness of Next Generation Solar UV Radiometers*, IEEE Nuclear And Space Radiation Effects (NSREC), Paris, 2014.

L. Gizon, *Helioseismology in a Stellar Context: From SDO to PLATO, 18th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun*, Flagstaff, Arizona, USA, June 9-13, 2014 (invited talk).

L. Gizon, *Helioseismology with SDO (Highlight)*, Annual meeting of the Astronomische Gesellschaft, Bamberg, Germany, September 22-26, 2014 (invited talk).

L. Gizon, *Large Scale Flows, Conference on Coupling and Dynamics of the Solar Atmosphere*, IUCAA, Pune, India, November 10-14, 2014 (keynote lecture).

L. Gizon, *PLATO Data Centre*, PLATO 2.0 Science Conference, Taormina, Sicily, Italy, December 3-5, 2014 (invited review talk).

L. Gizon, *Sounding the Sun and Stars*, TIFR Colloquium, Mumbai, India, November 5, 2014 (invited talk).

L. Gizon, *Sunquakes*, DWIH New Delhi - Excellence on Tour 2014, Kolkata, Science City, India, March 23, 2014 (public lecture).

L. Gizon, *Trends in theoretical helioseismology*, HELAS VI / SOHO 28 / SPACEINN international conference, MPS, Göttingen, Germany, September 1-5, 2014 (oral).

L. Gizon, N. Walton, G. Rixon, S. Hodgkin, E. Gonzalez-Solares, **R. Burston**, and M. Deleuil, *The PLATO Exoplanet Analysis System — Data Processing Challenges from the Next Generation Planet Hunter*, ADASS XXIV: The 24th annual ADASS conference, Calgary, Canada, October 5-9, 2014 (oral).

O. Grasset, S. Barabash, L. Bruzzone, M. Dougherty, C. Erd, L. Fletcher, P. Gare, R. Gladstone, L. Gurvits, **P. Hartogh**, H. Hussmann, L. Iess, R. Jaumann, Y. Langevin, P. Palumbo, G. Piccioni, D. Titov, and J.-E. Wahlund, *JUICE: an ESA-led Large Mission to the Jupiter System*, 11th Annual Meeting, Asia Oceania Geosciences Society, Sapporo, Japan, 28 July - 01 August, 2014 (invited talk).

P. Grete, *Nonlinear subgrid-scale closures in magnetohydrodynamic turbulence*, MHD Days 2014, Potsdam, Germany, December, 02-03, 2014.

P. Grete, *Plasma Turbulenz - misst Du noch oder simulierst Du schon?*, Vortrag im Rahmen der öffentlichen Führung, Institut für Astrophysik, Oct 30, 2014 (oral).

P. Grete, *Subgrid-scale closures in highly compressible MHD turbulence: turbulent energies*, XXXIV Dynamics Days Europe, Bayreuth, Germany, Sep 08-12, 2014 (oral).

P. Grete, *Subgrid-scale modeling of highly compressible MHD turbulence: momentum closure*, 5th Black Sea Biennial School and Workshop on Space Plasma Physics, Kiten, Bulgaria, Aug, 2014 (oral).

P. Grete and D. Vlaykov, *Subgrid-scale closures for MHD turbulence,* Magnetic fields from the sun to black holes, Paris, France, Nov 17-19, 2014 (poster).

E. E. Grigorenko, **E. A. Kronberg**, **P. W. Daly**, and M. S. Dolgonosov, *Ion acceleration in the vicinity of near-Earth X-line*, Geospace Revisited: a Cluster/MAARBLE/Van Allen Probes Conference, Rhodes, Greece, Sep. 15–20, 2014 (poster).

M. Grygalashvyly, E. Becker, G. Sonnemann, and **P. Hartogh**, *Advanced model and theory of the OH* layer*, 11th Annual Meeting, Asia Oceania Geosciences Society, Sapporo, Japan, 28 July - 01 August, 2014 (oral).

S. Gulkis, M. Allen, P. Von Allmen, G. Beaudin, D. Biver, N.and Bockelee-Morvan, M. Choukroun, J. Crovisier, P. Encrenaz, T. Encrenaz, M. Frerking, **P. Hartogh**, M. Hofstadter, W. Ip, M. Janssen, **C. Jarchow**, L. Kamp, S. Keihm, S. Lee, E. Lellouch, C. Leyrat, **L. Rezac**, F. P. Schlörb, and T. Spilker, *Early Results from the MIRO Instrument at Comet Churyumov-Gerasimenko*, European Planetary Science Congress 2014, Cascais, Portugal, September 7-12, 2014.

S. Gulkis, M. Allen, P. Von Allmen, G. Beaudin, N. Biver, D. Bockelee-Morvan, M. Choukroun, J. Crovisier, P. Encrenaz, T. Encrenaz, M. Frerking, **P. Hartogh**, M. Hofstadter, W. Ip, M. Janssen, **C. Jarchow**, L. Kamp, S. Keihm, S. Lee, E. Lellouch, C. Leyrat, **L. Rezac**, F. Schlörb, and T. Spilker, *Early observations of comet Churyumov-Gerasimenko with the Rosetta MIRO submillimeter instrument*, Asteroids, Comets, Meteors 2014, Helsinki, Finnland, June 30 - July 4, 2014.

S. Haaland, *Cold Ion Outflow from the Polar Cap Region: Cluster Results,* Magnetosphere-Ionosphere Coupling in the Solar System, Yosemite, USA, Feb 8-15, 2014 (oral).

S. Haaland, *Estimation of cold ion outflow rates throughout a geomagnetic storm*, AGU Fall meeting, San Francisco, Dec 15-19, 2014 (oral).

S. Haaland, **K. Li**, E. Engwall, A. Eriksson, M. André, B. Lybekk, and A. Pedersen, *Cold Ion Outflow: Cluster Measurements During the GEM First Storm Period*, GEM 2014, Portsmouth, Virginia, USA, June 14-19, 2014 (oral).

S. Haaland, J. Reistad, P. Tenfjord, L. Maes, J. De Keyser, R. Maggiolo, C. Anekallu, and N. Dorville, *Characteristics of the flank magnetopause: Cluster results*, Geospace Revisited: a Cluster/MAARBLE/Van Allen Probes Conference, Rhodes, Greece, Sep. 15–20, 2014 (oral).

S. Haaland, J. Reistad, P. Tenfjord, L. Maes, J. DeKeyser, C. Anekallu, and J. Gjerloev, *Dawn-dusk asymmetries in the magnetopause and ring current*, AGU Fall meeting, San Francisco, Dec 15-19, 2014 (oral).

J.-P. Halain, P. Rochus, E. Renotte, F. Auchère, D. Berghmans, L. Harra, **U. Schühle**, W. Schmutz, A. Zhukov, R. A. Cuadrado, F. Delmotte, C. Dumesnil, M. Gyo, T. Kennedy, R. Mercier, F. Verbeeck, M. Thomé, **K. Heerlein**, A. Hermans, L. Jacques, A. Mazzoli, **S. Meining**, L. Rossi, J. Tandy, P. Smith, and B. Winter, *The extreme UV imager of solar orbiter: from detailed design to flight model*, Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray, Montreal, June 22, 2014 (oral).

X. Han, **M. Fränz**, D. Andrews, **E. Dubinin**, W. Wan, and S. Barabash, *The control of Martian ionopause altitude by the crustal and induced magnetic field strength*, European Geosciences Union General Assembly, Vienna, Austria, Apr 27-May 2, 2014 (poster).

P. Hartogh, *Detection and characterization of Ganymede's atmosphere*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

P. Hartogh, *D/H in comets and origin of water on Earth and planets*, 11th Annual Meeting, Asia Oceania Geosciences Society, Sapporo, Japan, 28 July - 01 August, 2014, invited (oral).

P. Hartogh, Bockeleé-Morvan, **L. Rezac**, R. Moreno, E. Lellouch, **M. Rengel**, **C. Jarchow**, M. de Val-Borro, J. Crovisier, and N. Biver, *Detection and characterization of Ganymede's and Callisto's water atmospheres*, 11th Annual Meeting, Asia Oceania Geosciences Society, Sapporo, Japan, 28 July - 01 August, 2014 (invited talk).

P. Hartogh, **T. Cavalié**, R. Moreno, E. Lellouch, O. Venot, G. Orton, **C. Jarchow**, T. Encrenaz, F. Selsis, F. Hersant, and L. Fletcher, *The origin of CO in the atmosphere of Uranus*, 11th Annual Meeting, Asia Oceania Geosciences Society, Sapporo, Japan, 28 July - 01 August, 2014 (poster).

P. Hartogh, H. Sagawa, and **M. Rengel**, *APEX submillimetre observations of HCl and HDO in the mesosphere of Venus*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

P. Hartogh, **L. Rezac**, and **C. Jarchow**, *Inversion simulations for the MIRO instrument on board of the Rosetta orbiter: characterizing the information content*, 11th Annual Meeting, Asia Oceania Geosciences Society, Sapporo, Japan, 28 July - 01 August, 2014 (oral).

V. Heidrich-Meisner, L. Bergner, R. Wimmer-Schweingruber, P. Wurz, P. Bochsler, F. Ipavich, G. Glöckler, B. Klecker, and **J. Paquette**, *Minor Ion Species in the Solar Wind as Seen with SOHO/Celias/MTOF*, American Geophysical Union Fall Meeting, San Francisco, United States, December 15-19, 2014.

M. Hilchenbach, *Castalia - A European Mission to a Main Belt Comet*, EGU, Vienna, April 27 - May 2, 2014 (poster).

M. Hilchenbach, *Cometary dust analog samples analyzed with RAMAN microscopy*, European Planetary Science Congress, Cascais, Portugal, Sep 7-12, 2014 (oral).

M. Hilchenbach, *Philae's landing and its impact on cometary regolith*, EGU, Vienna, April 27 - May 2, 2014 (oral).

M. Hilchenbach, K. Hornung, J. Rynö, H. Fischer, and J. Silen, *Dust-grain fragmentation envisaged at comet 67P/Churyumov-Gerasimenko in view of potential ROSETTA COSIMA observations*, Asteroids, Comets, Meteors, Helsinki, Finland, June 30 - July 4, 2014 (poster).

M. Hilchenbach, J. Kissel, C. Briois, H. Henkel, Y. Langevin, R. Schulz, J. Silen, K. Altweg, L. Colangeli, H. Cottin, C. Engrand, A. Glasmachers, E. Grün, G. Haerendel, H. Höfner, K. Hornung, E. Jessberger, A. Koch, H. Lehto, K. Lehto, F. Raulin, L. Le Roy, J. Rynö, W. Steiger, T. Stephan, L. Thirkell, R. Thomas, K. Torkar, K. Varmuza, and K.-P. Wanczek, *Cosima - Cometary Dust Analysis Next to Comet 67P/Churyumov-Gerasimenko*, AGU Fall Meeting, San Francisco, CA, US, Dec 15-19, 2014 (oral).

M. Hilchenbach, J. Kissel, C. Briois, H. von Hörner, Y. Langevin, R. Schulz, J. Silen, K. Altwegg, L. Colangeli, H. Cottin, C. Engrand, A. Glasmachers, E. Gruen, G. Haerendel, H. Henkel, H. Höfner, K. Hornung, E. Jessberger, A. Koch, H. Letho, K. Letho, F. Raulin, L. Le Roy, J. Rynö, W. Steiger, T. Stephan, T. Laurent, R. Thomas, K. Torkar, K. Varmuza, and K. P. Wanczek, COSIMA - *Cometary Dust Analysis in the inner coma of Comet 67P/Churyumov-Gerasimenko*, American Astronomical Society, DPS meeting, Tuscon, Arizona, US, November 9-14, 2014 (poster).

M. Hilchenbach, **O. Stenzel**, C. Briois, K. Hornung, C. Engrand, H. Cottin, J. Silen, **J. Paquette**, and J. Ryno, *Dust-coma interaction as observable with Rosetta-COSIMA near comet 67P/Churyumov-Gerasimenko*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

M. Hofmann, **H. Sierks**, and J. Blum, *Small-scale impacts as a trigger for an avalanche in a low-gravity environment*, ACM 2014, Helsinki, June 30 - July 4, 2014 (oral).

M. Hofmann, **H. Sierks**, and J. Blum, *Small Scale Impacts as trigger for an avalanche in a low gravity environment*, European Geosciences Union General Assembly, Vienna, Austria, Apr 27-May 2, 2014 (poster).

M. Hofmann, *Rosetta: Das Abenteuer geht weiter, Rosetta and Philae Lander Event*, MPS, Göttingen, November 12, 2014. (oral).

M. D. Hofstadter, M. Allen, P. von Allmen, G. Beaudin, N. Biver, D. Bockelee-Morvan, M. Choukroun, J. Crovisier, P. Encrenaz, T. Encrenaz, M. Frerking, S. Gulkis, **P. Hartogh**, W. Ip, M. Janssen, **C. Jarchow**, L. Kamp, S. Keihm, S. Lee, E. Lellouch, C. Leyrat, **L. Rezac**, F. P. Schlörb, and T. Spilker, *Millimeter and Submillimeter Observations of comet 67P/C-G with the MIRO Instrument*, American Astronomical Society, DPS meeting #46, Tucson, AZ, USA, November 9-14, 2014.

V. Hue, **T. Cavalié**, F. Hersant, M. Dobrijevic, T. Greathouse, E. Lellouch, **P. Hartogh**, T. Cassidy, A. Spiga, S. Guerlet, and M. Sylvestre, *2D-photochemical modeling of Saturn's stratosphere: hydrocarbon and water distributions*, American Astronomical Society, DPS meeting #46, Tucson, AZ, USA, November 9-14, 2014.

V. Iancu, N. Tarcea, **M. Hilchenbach**, F. Langenhorst, and J. Popp, *Perchlorate Salt Detectability in Mars Soil Analogues Using Raman Spectroscopy*, 11th International GeoRaman Conference, St. Louis, Missouri, US, June 15-19, 2014 (poster).

D. Innes, *Observations of coronal heating with EUI*, EUI consortium meeting, Brussels, December 10-12, 2014 (oral).

D. Innes, *Observations of the corona heating*, European Solar Physics Meeting, Dublin, September 8-12, 2014 (invited review).

D. Innes, *Solar Jets*, MPPC general meeting, Berlin, June 28 - July 1, 2014 (oral).

D. Innes, **L. Guo,** A. Bhattacharjee, Y. Huang, and **D. Schmit**, *Observations of flare supra-arcades*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

N. Jain and **J. Büchner**, *Spreading of magnetic reconnection by electron scale dispersive waves*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (invited talk).

K.-L. Jessup, E. Marcq, F. Mills, Y. Yung, T. Roman, J. L. Berteaux, A. Mahieux, V. Wilquet, A. C. Vandaele, C. Wilson, S. Limaye, and **W. Markiewicz**, *HST/STIS Observations of Venus' Dayside Atmosphere, from morning to noon*, American Astronomical Society, DPS meeting #46, Tucson, Arizona, USA, Novenber 9-14, 2014 (oral).

G. H. Jones, K. Altwegg, I. Bertini, A. Bieler, **H. Böhnhardt**, N. Bowles, A. Braukhane, M. T. Capria, A. J. Coates, V. Ciarletti, B. Davidsson, C. Engrand, A. Fitzsimmons, A. Gibbings, O. Hainaut, M. Hallmann, A. Herique, **M. Hilchenbach**, M. Homeister, H. Hsieh, E. Jehin, W. Kofman, L. M. Lara, J. Licandro, S. C. Lowry, F. Moreno, K. Muinonen, M. Pätzold, A. Penttilä, D. Plettmeier, D. Prialnik, U. Marboeuf, F. Marzari, K. Meech, A. Rotundi, A. Smith, **C. Snodgrass**, I. Thomas, and M. Trieloff, *Castalia — A Mission to a Main Belt Comet*, Conference on Spacecraft Reconnaissance of Asteroid and Comet Interiors, Tempe, Jan. 8-10, 2014 (oral).

K. Kecskemety, M. Zeldovich, Y. Logachev, and **R. Bučik**, *Suprathermal ions 3He, 4He, C, O, Fe in solar wind particle fluxes at 1 AU in solar cycles 23 and 24*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

I. Khatuntsev, S. Limaye, N. Ignatiev, **W. Markiewicz**, M. Patsaeva, A. Turin, and D. Titov, *Upper cloud motions from the Venus Monitoring Camera imaging onboard Venus Express in period from 2006 to 2014*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (poster).

I. V. Khatuntsev, M. V. Patsaeva, N. I. Ignatiev, D. V. Titov, **W. J. Markiewicz**, S. S. Limaye, and A. V. Turin, *Variations of the zonal flow at Venus cloud tops from VMC/VEX UV images in period from 2006 to 2014*, European Planetary Science Congress 2014, Cascais, Portugal, September 7-12, 2014 (poster).

P. Kilian, *Electron Physics in Shock Waves*, European Geosciences Union General Assembly, Vienna, Austria, Apr 29, 2014.

P. Kilian, *Week collisionless shock simulations*, 4th PlanetMag Meeting, Potsdam, Jan 24, 2014.

P. Kilian, C. Schreiner, A. Kempf, U. Ganse, F. Spanier, and **J. Büchner**, *Simulation of weak collionless shockfronts in the solar wind*, DPG Spring Meeting, Berlin, March 20, 2014 (oral).

B. Knapmeyer-Endrun, *Preparing the installation of station ELYS: The InSight mission to Mars*, 40. Sitzung der Arbeitsgemeinschaft Seismologie der FKPE, Gross-Dölln, October 2, 2014 (oral).

B. Knapmeyer-Endrun, *Red planet, seismologically dead planet? The InSight mission to Mars*, Working Group Seminar General Geophysics/Seismology, Universität Potsdam, June 27, 2014.

B. Knapmeyer-Endrun, W. Geissler, F. Krüger, and C. Legandre, *The outline of a cratonic margin: Mapping structure across the Trans-European Suture Zone with receiver functions*, Seminar aktuelle Forschungsthemen, Christian-Albrechts-Universität Kiel, February 5, 2014 (oral).

B. Knapmeyer-Endrun and C. Hammer, *Applying a Hidden Markov Model-based event detection and classification algorithm to Apollo lunar seismic data*, AGU Fall Meeting, San Francisco, Dec. 15-19, 2014 (poster).

B. Knapmeyer-Endrun, F. Krüger, and the PASSEQ Working Group, *Crustal and lithospheric structure across the boundary of the East European Craton from receiver functions*, AGU Fall Meeting, San Francisco, Dec. 15-19, 2014 (poster).

A. Kotova, **N. Krupp**, **E. Roussos**, and I. Dandouras, *Simulation of the Galactic Cosmic Rays interaction with Saturn;s atmosphere and rings*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

A. Kotova, **E. Roussos**, **N. Krupp**, and I. Dandouras, *Energetic particle tracing in the magnetosphere of Saturn*, MIMI Team Meeting, MPS, Gottingen, Germany, June 17, 2014 (oral).

A. Kotova, **E. Roussos**, **N. Krupp**, and I. Dandouras, *Galactic Cosmic Rays as a source for Saturn Inner Radiation Belt*, MAPS workshop, MPS, Gottingen, Germany, June 18-20, 2014 (poster).

A. Kotova, **E. Roussos**, **N. Krupp**, and I. Dandouras, *Galactic Cosmic Rays impact on Saturn's innermost radiation belt formation*, European Planetary Science Congress EPSC, Cascais, Portugal, 7-12 Sep, 2014 (poster).

S. Krimigis, D. Mitchell, **N. Krupp**, D. Hamilton, J. Dandouras, and the Cassini/MIMI Team, *Visualizing the Invisible and Other Wonders of Saturn' s Magnetosphere*, European Geosciences Union General Assembly, Vienna, Austria, Apr 27-May 2, 2014 (invited talk).

N. Krivova, *Spectral And Total IRradiance REconstructions (SATIRE): Update*, TOSCA/SOLID Workshop Long-term variations of solar activity and their impacts: From the Maunder Minimum to the 21st century, Corfu, Greece, September 29 - October 2, 2014 (invited talk).

N. Krivova, *The solar cycle 24 and predictions of future solar variability*, 5th International HEPPA Workshop in conjunction with SPARC/SOLARIS-HEPPA, Baden-Baden, May 5-9, 2014 (invited talk).

N. Krivova, **M. Dasi-Espuig**, **S. K. Solanki**, and **K. L. Yeo**, *Reconstructions of Solar Irradiance on Centennial Time Scales*, 40th COSPAR Scientific Assembly, Moscow, Russia, August 2-10, 2014 (invited talk).

E. Kronberg, *Cluster RAPID Energetic Ion and Electron Measurements during the GEM First Storm Period*, GEM, Portsmouth, Virginia, USA, June 15-18, 2014 (invited talk).

E. Kronberg, S. Savin, **P. W. Daly**, and E. Amata, *Oxygen ion outflow from the magnetosphere*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (invited talk).

H. Krüger, *Raumsonde Rosetta - Verabredung mit einem Kometen*, Volkshochschule, Hildesheim, Germany, October 07, 2014 (oral).

H. Krüger, *Rosetta — Rendezvous mit einem Kometen*, Tag der Astronomie, Sternwarte Radebeul, April 05, 2014.

H. Krüger, *Rosetta - Rendezvous mit einem Kometen*, Vortragsreihe "Raumfahrt aus Leidenschaft", Universität Stuttgart, Institut für Raumfahrtsysteme, January 30, 2014 (oral).

H. Krüger, *Rosetta - Rendezvous mit einem Kometen*, Astronomie-Stiftung Trebur, Trebur, Germany, June 13, 2014 (oral).

H. Krüger, *Rosetta: Rendezvous mit einem Kometen*, Lehrerfortbildung, Sternwarte Sonneberg, September 27-29, 2014 (oral).

H. Krüger, *Rosetta/Philae kurz vor der Landung auf dem Kometen Tschurjumov-Gerasimenko*, Volkshochschule Mosbach (Baden), Binau, October 17, 2014 (oral).

H. Krüger, T. Albin, A. Flandes, H. Fischer, A. Hirn, **A. Loose**, K. J. Seidensticker, and W. Arnold, *Dust Impact Monitor DIM Onboard Rosetta/Philae: Calibration Experiments with Ice Particles as Cometary Analogue Materials*, Asteroids, Comets Meteors Conference, Helsinki, Finland, June 30 - July 04, 2014 (oral).

H. Krüger and the SESAME team, *Grain Properties at the Nucleus of Comet 67P/C-G*, 37th Rosetta Science Working Team Meeting, European Space Astronomy Center/ESAC, Villafranca del Castillo, Spain, June 11, 2014 (oral).

N. Krupp, *Global configuration and seasonal variations of the Saturn's magnetosphere*, Saturn Science Conference: Saturn in the 21st Century, Madison, WI, USA, 4-8 August, 2014 (oral).

N. Krupp, *JUICE: Europe's mission to Jupiter*, 24th European Cosmic Ray Symposium, Kiel, Sep 1-5, 2014 (invited talk).

N. Krupp, *Saturns Monde: Aktive Geysire, Seen aus flüssigem Methan und gefrorene Eiswüsten*, Astronomischer Verein Basel, Basel, Nov 5, 2014 (oral).

N. Krupp, S. M. Krimigis, D. G. Mitchell, and D. C. Hamilton, *Visualizing the Invisible and other wonders of Saturn's magnetosphere*, European Planetary Science Congress EPSC, Cascais, Portugal, 7-12 Sep, 2014 (oral).

N. Krupp, **E. Roussos**, **M. Fränz**, **B. Palmaerts**, F. Bagenal, R. Wilson, and C. Paranicas, *Global Flow Patterns in the Jovian Magnetosphere: Galileo/EPD and Galileo/PLS measurements*, European Planetary Science Congress EPSC, Cascais, Portugal, 7-12 Sep, 2014 (keynote talk).

N. Krupp, **E. Roussos**, C. Paranicas, A. Sicard, G. Hospodarsky, and Y. Shprits, *Measurements and modelling of the Jovian and Saturnian radiation belts*, European Geosciences Union General Assembly, Vienna, Austria, Apr 27-May 2, 2014 (invited talk).

T. Kuroda, Y. Kasaba, **A. S. Medvedev**, and **P. Hartogh**, *CO2 snowfalls modulated by the baroclinic waves in the northern winter polar atmosphere of Mars*, Fifth international workshop on the Mars atmosphere: Modelling and observations, Oxford, UK, January 13-16, 2014 (oral).

T. Kuroda, **A. S. Medvedev**, and **P. Hartogh**, *Parameterization of the radiative forcing in the stratosphere of Jupiter*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

T. Kuroda, **A. S. Medvedev**, and **P. Hartogh**, *Radiative forcing by molecules in the stratosphere of Jupiter*, 11th Annual Meeting, Asia Oceania Geosciences Society, Sapporo, Japan, 28 July - 01 August, 2014 (invited talk).

T. Kuroda, **A. S. Medvedev**, Y. Kasaba, and **P. Hartogh**, *CO2 snowfalls, seasonal ice cap formations and baroclinic waves in the winter polar atmosphere of Mars*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

T. Kuroda, **A. S. Medvedev**, Y. Kasaba, and **P. Hartogh**, Weather Forecasts on Mars: *CO2 Snowfalls Related to the Baroclinic Waves in the Northern Winter Polar Atmosphere*, Eighth International Conference on Mars, Pasadena, CA, USA, July 14-18, 2014.

A. Lagg, *First Chromospheric (He I 1083 nm) and Photospheric (Fe I 1565 nm) Observations with GREGOR/GRIS*, Indo-German Workshop on Solar Astronomy, Bangalore, India, Nov 17-18, 2014 (oral).

A. Lagg, *The Chromospheric Field Probed by the He I 10830 Line, Coupling and Dynamics of the Solar Atmosphere*, Pune, India, Nov 10-14, 2014 (invited talk).

Y. Langevin, K. Hornung, **M. Hilchenbach**, J. Kissel, J. Silen, C. Briois, R. Schulz, D. Baklouti, and P. Eng, *Optical Detection and Characterization of Cometary Grains Collected for Analysis by the COSIMA Mass Spectrometer on-board ROSETTA*, AGU Fall Meeting, San Francisco, CA, US, Dec 15-19, 2014 (oral).

J. Langfellner, *Spatially resolved vorticity in supergranulation with helioseismology*, HELAS VI, MPS, Göttingen, September 1-5, 2014 (oral).

L. M. Lara, E. Lellouch, M. González, R. Moreno, and **M. Rengel**, *Exploring external time-dependent sources of H2O into Titan's atmosphere*, European Geosciences Union General Assembly, Vienna, Austria, Apr 27-May 2, 2014 (oral).

S. Limaye, S. Bougher, R. Clancy, D. Grassi, T. Imamura, E. Kohler, P. Krause, S. Lebonnois, A. Mahieux, A. Migliorini, F. Montmessin, M. Pätzold, A. Piccialli, **M. Rengel**, A. Rodin, B. Sandor, M. Sorning, S. Tellmann, T. Widemann, I. Müller-Wodarg, and L. Zasova, *Towards a Self Consistent Model of the Thermal Structure of the Venus Atmosphere*, European Planetary Science Congress EPSC, Cascais, Portugal, 7-12 Sep, 2014 (poster).

S. S. Limaye, **W. J. Markiewicz**, and R. J. Krauss, *Temporal variations observed in the clouds of Venus from Venus Monitoring Camera*, European Planetary Science Congress 2014, Cascais, Portugal, September 7-12, 2014 (poster).

B. Löptien, *Helioseismology with Solar Orbiter*, HELAS VI / SOHO 28/SPACEINN, Göttingen, September 1-5, 2014 (oral).

B. Lybekk, **S. Haaland**, and A. Pedersen, *Cold plasma density: asymmetries and solar cycle effects*, Geospace Revisited: a Cluster/MAARBLE/Van Allen Probes Conference, Rhodes, Greece, Sep. 15–20, 2014 (poster).

W. Markiewicz, *Photometric Observations of Variability of Mars and Venus*, Summer School Alpbach 2014, Space Missions for Geophysics of the Terrestrial Planets, Alpbach/Tyrol - Austria, July 15-24, 2014, (invited talk).

G. M. Mason, **R. Bučík**, **D. E. Innes**, **U. Mall**, **A. Korth**, and R. Gomez-Herrero, *Long-lasting 3He-rich solar energetic particle sources*, STEREO SEP meeting, APL/JHU, Laurel, MD, USA, September 25, 2014 (oral).

N. Masoumzadeh, **H. Böhnhardt**, J. Y. Li, and **J. B. Vincent**, *Surface reflectance analysis of asteroid (21) Lutetia*, Asteroids, Comets, Meteors, Helsinki, June 30 - July 04, 2014 (oral).

A. Medvedev, E. Yigit, T. Kuroda, and **P. Hartogh**, *Influence of global dust storms on the mesosphere and lower thermosphere of Mars*, European Planetary Science Congress 2014, Cascais, Portugal, September 7-12, 2014 (oral).

A. S. Medvedev, **J. Sethunadh**, and **P. Hartogh**, *General circulation of the Jovian stratosphere*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

A. S. Medvedev, E. Yigit, T. Kuroda, and **P. Hartogh**, *Dynamical coupling between the lower Martian atmosphere and thermosphere*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

A. S. Medvedev, E. Yigit, T. Kuroda, and **P. Hartogh**, *Response of the Martian upper atmosphere to lower atmospheric dust storms: GCM study*, Fifth international workshop on the Mars atmosphere: Modelling and observations, Oxford, UK, January 13-16, 2014 (oral).

M. Müller, C. Dominik, T. Lim, and **M. Rengel**, *Characterizing the Kuiper belt with SPICA/SAFARI*, SPICA Science Workshop, Leiden, the Netherlands, May 21-23, 2014 (oral).

P. Munoz, **P. Kilian**, and **J. Büchner**, *PIC-code simulation of spontaneous instabilities of current sheets: anisotropic heating and guide field influence on magnetic reconnection*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (invited talk).

K. Nagashima, *HMI multi-height Dopplergram study*, LWS Helioseismology Workshop #4 "Solar Subsurface Flows from Helioseismology: Problems and Prospects", Stanford, CA, USA, July 21-23, 2014 (oral).

K. Nagashima, *SDO/HMI multi-height velocity measurements*, HELAS VI/ SOHO-28/ SPACEINN Conference "Helioseismology and Applications", Max-Planck-Institut für Sonnensystemforschung, Göttingen, Germany, September 4, 2014 (oral).

N. Oklay and **J.-B. Vincent**, *First time comet observations from National Observatory of Turkey*, ACM, Helsinki, Finland, 30 June-4 July, 2014 (poster).

N. Oklay and **J.-B. Vincent**, *First time comet observations from National Observatory of Turkey*, EPSC, Portugal, 07-12 September, 2014 (poster).

L. 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 the main-belt comet P/2012 T1 (PanSTARRS)*, Asteroids, Comets, Meteors 2014, Helsinki, Finland, June 30 - July 4, 2014.

G. Orton, L. Fletcher, H. Feuchtgruber, E. Lellouch, R. Moreno, **P. Hartogh**, **C. Jarchow**, B. Swinyard, J. Moses, M. Burgdorf, H. Hammel, M. Line, A. Mainzer, M. Hofstadter, G. Sandell, and C. Dowell, *Models for Temperature and Composition in Uranus from Spitzer, Herschel and Ground-Based Infrared through Millimeter Observations*, EGU General Assembly 2014, Vienna, April 27 - May 2, 2014.

G. Orton, L. N. Fletcher, H. Feuchtgruber, E. Lellouch, R. Moreno, T. Encrenaz, **P. Hartogh**, **C. Jarchow**, B. Swinyard, **T. Cavalie**, J. Moses, M. Burgdorf, H. Hammel, M. Line, A. K. Mainzer, M. Hofstadter, G. H. Sandell, C. D. Dowell, E. Pantin, and T. Fujiyoshi, *Models for Temperature and Composition in Uranus from Spitzer, Herschel and Ground-Based Infrared through Millimeter Observations*, American Astronomical Society, DPS meeting #46, Tucson, AZ,USA, November 9-14, 2014.

L. Paganini, M. A. DiSanti, M. J. Mumma, G. L. Villanueva, B. P. Bonev, E. L. Gibb, **H. Böhnhardt**, M. Lippi, and H. U. Käufl, *Pre- And Post-Perihelion Results On The Unexpectedly-Bright Comet C/2012 F6 (Lemmon) Using IR Spectroscopy*, DPS Meeting 45, Tucson, November 9-14, 2014, (poster).

B. Palmaerts, A. Radioti, D. Grodent, E. Chané, and B. Bonfond, *Transient small-scale structure in the main auroral emission at Jupiter*, European Planetary Science Congress EPSC, Cascais, Portugal, 7-12 Sep, 2014 (oral).

J. Paquette, C. Engrand, **O. Stenzel**, and **M. Hilchenbach**, *Measuring Oxygen Isotopes with COSIMA*, AGU Fall Meeting, San Francisco, CA, US, Dec 15-19, 2014 (oral).

J. A. Paquette, *A Method of Identifying Additional Mass Peaks Using COSIMA Data*, 77th Annual Meeting of the Meteoritical Society, Casablanca, Morocco, September 8-13, 2014.

J. A. Paquette, C. Engrand, **O. Stenzel**, and **M. Hilchenbach**, *Measuring Oxygen Isotopes with COSIMA*, American Geophysical Union Fall Meeting, San Francisco, United States, December 15-19, 2014 (poster).

J. A. Paquette and J. A. N. III, *A Model of Lightning in the Proto-Solar Nebula*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

J. A. Paquette and **O. Stenzel**, *The Effects of Sputtering Yields on the Rosetta/COSIMA Instrument Efficiency*, Asteroids Comets Meteors 2014, Helsinki, Finland, June 30 - July 4, 2014 (poster).

J. Park, **D. Innes**, **R. Bučik**, Y.-J. Moon, and S. W. Kahler, *The study of solar energetic protons associated with EUV waves*, 224th AAS Meeting, Boston, MA, June 1-5, 2014 (poster).

M. Patsaeva, N. Ignatiev, **W. J. Markiewicz**, I. Khatuntsev, D. Titov, and D. Patsaev, *Mesoscale circulation at the upper cloud level at middle latitudes from the imaging by Venus Monitoring Camera onboard Venus Express*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (poster).

M. Patsaeva, I. Khatuntsev, D. Patsaev, D. Titov, N. Ignatiev, **W. J. Markiewicz**, and A. Rodin, *Correlation of the cloud top wind pattern with cloud morphology at the upper cloud level of Venus at 25S-75S from VMC/Venus Express*, European Planetary Science Congress 2014, Cascais, Portugal, September 7-12, 2014 (poster).

E. V. Petrova, **W. J. Markiewicz**, and **O. S. Shalygina**, *The latitude gradient of droplet sizes of the upper Venus clouds at 35-60S from the VMC/VEx observations*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

J. J. Plaut, S. Barabash, L. Bruzzone, M. Dougherty, C. Erd, L. Fletcher, R. Gladstone, O. Grasset, L. Gurvits, **P. Hartogh**, H. Hussmann, L. Iess, R. Jaumann, Y. Langevin, P. Palumbo, G. Piccioni, D. Titov, and J.-E. Wahlund, *Jupiter Icy Moons Explorer (JUICE): Science Objectives, Mission and Instruments*, 45th Lunar and Planetary Science Conference, The Woodlands, TX, USA, March 17-21, 2014.

S. Protopapa, W. Grundy, S. Tegler, J. Bergonio, **H. Böhnhardt**, and L. Barrera, *Absorption Coefficients of the Methane-Nitrogen Binary Ice System: Implications for Pluto*, DPS Meeting 45, Tucson, November 9-14, 2014, (oral).

M. V. Rashev, **E. A. Kronberg**, and **P. W. Daly**, *Geant4 modelling of RAPID/IES detector on Cluster*, Geospace Revisited: a Cluster/MAARBLE/Van Allen Probes Conference, Rhodes, Greece, Sep. 15–20, 2014 (poster).

L. Regoli, M. Feyerabend, **A. Kotova**, **E. Roussos**, G. Jones, **N. Krupp**, and A. Coates, *Mapping the flow of energetic particles in Titan's exobase*, European Planetary Science Congress EPSC, Cascais, Portugal, 7-12 Sep, 2014 (poster).

L. Regoli, M. Feyerabend, **A. Kotova**, **E. Roussos**, G. Jones, **N. Krupp**, and A. Coates, *Mapping the flow of energetic particles in Titan's exobase*, Cassini MAPS workshop, MPS, Göttingen, Germany, June 18-20, 2014 (poster).

L. Regoli, M. Feyerabend, **A. Kotova**, **E. Roussos**, G. Jones, **N. Krupp**, and A. Coates, *Mapping the flow of energetic particles in Titan's exobase, 10 years of Cassini-Huygens in the Saturnian system*, Royal Astronomical Society, London, UK, October 10, 2014 (poster).

L. Regoli, M. Feyerabend, **A. Kotova**, **E. Roussos**, G. Jones, **N. Krupp**, and A. Coates, *Titan's magnetospheric environment*, National Astronomy Meeting, Portsmouth, UK, June 26, 2014 (oral).

L. Regoli, M. Feyerabend, **A. Kotova**, **E. Roussos**, G. Jones, **N. Krupp**, and A. Coates, *Titan's magnetospheric environment*, 6th Alfvén Conference, UCL, London, UK, July 7-11, 2014 (oral).

L. Regoli, M. Feyerabend, **A. Kotova**, **E. Roussos**, G. Jones, **N. Krupp**, and A. Coates, *Tracing of energetic particles in the vicinity of Titan*, European Geosciences Union General Assembly, Vienna, Austria, Apr 27-May 2, 2014 (poster).

D. Reiss, **N. M. Hoekzema**, and **O. J. Stenzel**, *Dust Deflation by Dust Devils on Mars Derived from Optical Depth Measurements Using the Shadow Method in HiRISE Images*, LPSC, The Woodlands, TX, USA, March, 2014 (poster).

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. Bockelée-Morvan, N. Biver, M. Banaszkiewicz, and A. González, *Tracing the gas composition of Titan's atmosphere with Herschel : Highlights*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (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. Bockelée-Morvan, N. Biver, M. Banaszkiewicz, and A. González, *Tracing the gas composition of Titan's atmosphere with Herschel : Advances and Discoveries*, 46th Annual Meeting of the Division for Planetary Sciences, Tucson, Arizona, November 9-14, 2014 (oral).

M. Rengel, H. Sagawa, and **P. Hartogh**, *The HCN distribution in the stratosphere of Titan: an intercomparison between the HCN distributions obtained with Herschel/PACS and APEX-2*, Asia Oceania Geosciences Society (AOGS) 11th Annual Meeting, Sapporo, Japan, July 28 - August 01, 2014 (oral).

M. Rengel, H. Sagawa, and **P. Hartogh**, *Venusian Mesospheric thermal structure and winds from May 2009 SMT CO spectral- line observations*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (poster).

M. Rengel, **L. Rezac**, M. de Val-Borro, **P. Hartogh**, **T. Cavalié**, **C. Jarchow**, and M. Dobrijevic, *New Determination of the HCN Profile in the Stratosphere of Neptune from Millimeter-wave Spectroscopy*, Asia Oceania Geosciences Society (AOGS) 11th Annual Meeting, Sapporo, Japan, July 28 - August 01, 2014 (poster).

T. L. Riethmüller, *Current Status of the SuFI 2 Data Reduction*, 7th SUNRISE Science Meeting, Göttingen, Germany, February 24-26, 2014 (oral).

T. L. Riethmüller, *New Results of the Comparison betw. SUNRISE 1 Data and MHD Simulations*, 7th SUNRISE Science Meeting, Göttingen, Germany, February 24-26, 2014 (oral).

T. L. Riethmüller and **S. K. Solanki**, *SUNRISE Mission Highlights*, Frontier Research in Astrophysics, Palermo, May 26-31, 2014 (oral).

T. L. Riethmüller, **S. K. Solanki**, and the SUNRISE team, *SUNRISE Mission Highlights*, Indo-German Workshop on Solar Physics, Bangalore, India, November 17-18, 2014 (oral).

T. L. Riethmüller and M. van Noort, *Unforeseen Obstacles to the SUNRISE/IMaX Data Reduction*, PHI Team Meeting, Titisee, Germany, July 1-3, 2014 (oral).

E. Roussos, **N. Krupp**, D. G. Mitchell, C. Paranicas, **B. Palmaerts**, C. Paranicas, S. M. Krimigis, **M. Andriopoulou**, W. S. Kurth, S. Badman, A. Masters, and M. K. Dougherty, *Quasi-Periodic injections of relativistic electrons in Saturn's magnetosphere*, European Planetary Science Congress EPSC, Cascais, Portugal, 7-12 Sep, 2014 (oral).

H. Sagawa, **P. Hartogh**, **M. Rengel**, and R. Güsten, *Submillimeter Observations of Chlorine-bearing Molecules in Venus Middle Atmosphere*, Asia Oceania Geosciences Society (AOGS) 11th Annual Meeting, Sapporo, Japan, July 28 - August 01, 2014 (oral).

P. Saint-Hilaire, **J. Schou**, J. C. Martinez Oliveros, H. S. Hudson, S. Krucker, H. Bain, and S. Couvidat, *Helioseismic and Magnetic Imager observations of linear polarization from a loop prominence system*, AAS Meeting #224, Boston, MA, USA, 2014 (poster).

S. Savin, E. Amata, **J. Büchner**, S. Klimov, **E. Kronberg**, L. Zelenyi, et al., *Study of Discrete and Turbulent Cascades in the Outer Magnetosphere: Resonances and Transport*, Annual Meeting of the Asia Oceania Geosciences Society, Sapporo, July 29, 2014 (oral).

K. Schindler, *The Mystery of Jovian Irregular Satellites - Looking for Answers with SOFIA*, PSI Seminar, Planetary Science Institute, Tucson, AZ, July 17, 2014 (oral).

K. Schindler, J. Wolf, and A. Krabbe, *Characterization of InGaAs-based cameras for astronomical applications using a new VIS-NIR-SWIR detector test bench*, SPIE Astronomical Telescopes + Instrumentation, Montréal, Quebec, Canada, June 22-27, 2014 (oral).

S. Schuh, *Auf der Suche nach einer zweiten Erde*, Robert-Mayer-Sternwarte, Heilbronn, October 17, 2014 (oral).

S. Schuh, *Extrasolare Planeten*, Nicolaus-Copernicus-Planetarium, Nürnberg, November 04, 2014, Öffentlicher Vortrag (oral).

U. Schühle, *Die VUV-Instrumente der Solar Orbiter Mission*, 430. Carl-Zeiss-Optikkolloquium, Jena, February 11, 2014 (oral).

M. Schüssler, *Simulation of magnetic structure in the photosphere*, Annual meeting of the Astronomische Gesellschaft, Splinter session on "High Resolution Physics", Bamberg, Germany, September 25-26, 2014 (invited talk).

M. Schüssler, *Small-scale magnetic structure at the solar surface*, Seventh Solar Information Processing Workshop, La Roche-en-Ardenne, Belgium, August 18-22, 2014 (invited review).

M. Schüssler, *Solar surface magnetism*, Colloquium MPI for Astrophysics, Garching, March 21, 2014 (oral).

C. Scopa, **H. Steininger**, **F. Goesmann**, W. B. Brinckerhoff, P. R. Mahaffy, and F. Raulin, *Detecting Organics with the Mars Organic Molecule Analyzer (MOMA) on the 2018 ExoMars rover*, International Workshop on Instrumentation for Planetary Missions, Washington DC, November 4-7, 2014.

J. Sethunadh, **A. S. Medvedev**, and **P. Hartogh**, *General circulation modeling of the Jovian stratosphere*, European Planetary Science Congress 2014, Cascais, Portugal, September 7-12, 2014 (oral).

A. Shapiro, *Solar irradiance variability on different timescales*, COST ES1005 - FP7 SOLID workshop on future solar scenarii, Corfu, Greece, September, 2014 (invited talk).

A. Shapiro, Variability of solar irradiance: What we do and do not know, Solar Metrology Symposium, Paris, France, October, 2014 (invited talk).

C. Snodgrass, L. Barrera, **H. Böhnhardt**, A. Guilbert-Lepoutre, O. Hainaut, D. Hutsemékers, E. Jehin, K. Meech, C. Opitom, R. Schulz, G. P. Tozzi, and **C. Tubiana**, *The activity cycle of 67P/Churyumov-Gerasimenko*, Asteroids, Comets, Meteors, Helsinki, June 30 - July 04, 2014 (oral)

S. K. Solanki, *Daytime Polarimetry*, IAU Symposium No. 305, Punta Leone, Costa Rica, November 30 - December 05, 2014 (invited keynote talk)

S. K. Solanki, *The Polarimetric and Helioseismic Imager on Solar Orbiter*, IAU Symposium No. 305, Punta Leone, Costa Rica, November 30 - December 05, 2014 (invited talk)

S. K. Solanki, *Major Challenges in Solar Physics*, Indo-German Workshop on Solar Astronomy, Bangalore, India, November 17 - 18, 2014 (invited keynote talk).

S. K. Solanki, *Major Challenges in Solar Physics*, Coupling and Dynamics of the Solar Atmosphere, Pune, India, November 10 - 14, 2014 (invited talk).

S. K. Solanki, *Perspectives of Solar Physics*, 10th Latin American Conference on Space Geophysics (X-COLAGE), Cusco, Peru, September 08 - 12, 2014 (invited talk).

S. K. Solanki, *Solar Spectral Irradiance and Links to Earth´s Climate*, 11th Annual Meeting of Asia Oceania Geoscience Society, Sapporo, Japan, July 28 - August 01, 2014 (invited talk).

O. J. Stenzel, **N. M. Hoekzema**, and **W. J. Markiewicz**, Mars' Atmospheric *Optical Depth from Mars Express HRSC and Mars Exploration Rovers A Comparison*, LPSC, The Woodlands, TX, USA, March, 2014 (poster).

O. J. Stenzel, K. Varmuza, C. Engrand, L. Ferrière, F. Brandstätter, C. Köberl, P. Filzmoser, and **M. Hilchenbach**, *Characterisation of meteoritic samples with the Rosetta Cosima TOF-SIMS laboratory reference model – a covariance approach*, ACM, Helsinki, 2014 (poster).

A. Stinson, S. Bagnulo, **H. Böhnhardt**, G. Tozzi, S. Fornasier, and K. Muinonen, *Broadband FORS/VLT polarimetry of comet nuclei: 9P/Tempel 1, 19P/Borrelly, 67P/Churyumov-Gerasimenko, 74P/Smirnova-Chernykh, and 152P/Helin-Lawrence*, Asteroids, Comets, Meteors, Helsinki, June 30 - July 04, 2014 (oral).

D. Titov, N. Altobelli, S. Barabash, L. Bruzzone, M. Dougherty, C. Erd, L. Fletcher, P. Gare, R. Gladstone, O. Grasset, L. Gurvits, **P. Hartogh**, H. Hussmann, L. Iess, R. Jaumann, Y. Langevin, G. Piccioni, and J.-E. Wahlund, *JUICE, a European mission to the Jovian system*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

D. Titov, S. Barabash, L. Bruzzone, M. Dougherty, L. Duvet, C. Erd, L. Fletcher, R. Gladstone, O. Grasset, L. Gurvits, **P. Hartogh**, H. Hussmann, L. Iess, R. Jaumann, Y. Langevin, P. Palumbo, G. Piccioni, and J.-E. Wahlund, *JUICE: The ESA Mission to Study Habitability of the Jovian Icy Moons*, Workshop on the Habitability of Icy Worlds, Pasadena, CA, USA, February 5-7, 2014.

D. Titov, S. Barabash, L. Bruzzone, M. Dougherty, C. Erd, L. Fletcher, P. Gare, R. Gladstone, O. Grasset, L. Gurvits, **P. Hartogh**, H. Hussmann, L. Iess, R. Jaumann, Y. Langevin, P. Palumbo, G. Piccioni, and J.-E. Wahlund, *JUICE: complementarity of the payload in adressing the mission science objectives*, EGU General Assembly 2014, Vienna, April 27 - May 2, 2014.

D. Titov, H. Svedhem, P. Drossart, F. W. Taylor, T. Zhang, S. Barabash, M. Paetzold, W. Piccioni, Giuseppe and **W. Markiewicz**, A. C. Vandaele, C. Wilson, and J.-L. Bertaux, *A new view of Earth's sister: Insights following nine years of Venus Express observations*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (oral).

V. M. Vasyliūnas, *Origin of periodicities in Saturn's magnetosphere: Is it a phenomenon unique to Saturn?*, Cassini/MAPS Workshop 2014, Göttingen, June 18-20, 2014 (oral).

V. M. Vasyliūnas, *The Axford conjecture and the properties of an open magnetosphere*, Parker Workshop on Magnetic Reconnection, São José dos Campos, Brazil, March 18-21, 2014 (invited tutorial presentation).

V. M. Vasyliūnas and P. Song, *Relative importance of thermosphere/ionosphere in magnetospheric electrodynamics at Earth, Jupiter, and Saturn*, AGU Fall Meeting, San Francisco, California, USA, December 15-19, 2014 (poster).

G. L. Villanueva, M. J. Mumma, R. E. Novak, H.-U. Käufl, **P. Hartogh**, T. Encrenaz, A. Tokunaga, and A. Khayat, *Revealing the water cycle on Mars via D/H isotopic measurements*, American Astronomical Society, DPS meeting #46, Tucson, AZ,USA, November 9-14, 2014.

J.-B. Vincent, *Comet-toolbox: numerical simulations of cometary dust tails in your browser*, Asteroids, Comets, Meteors, Helsinki, June 30 - July 4, 2014 (poster).

J.-B. Vincent, **N. Oklay**, S. Marchi, **S. Höfner**, and **H. Sierks**, *Craters on comets*, Asteroids, Comets, Meteors, Helsinki, June 30 - July 4, 2014 (oral).

J.-B. Vincent, **H. Sierks**, L. Lara, **P. Gutierez**, R. Rodrigo, M. Pajola, **N. Oklay**, J. Knollenberg, I. Bertini, Z.-Y. Lin, W.-H. Ip, N. Thomas, B. Davidsson, S. Mottola, S. Lowry, S. Fornasier, D. Bodewits, M. Massironi, S. Marchi, S. Hviid, H. U. Keller, S. Besse, L. Jorda, O. Groussin, M. AHearn, **S. Höfner**, **C. Snodgrass**, and the OSIRIS team, *Jets and sources of activity on 67P observed by OSIRIS*, EuroPlanet Science Congress, Cascais, Portugal, September 08-13, 2014 (oral).

A. P. Walsh, **S. Haaland**, C. Forsyth, A. M. Keesee, J. Kissinger, **K. Li**, A. Runov, J. Soucek, B. M. Walsh, S. Wing, and M. G. G. T. Taylor, *Dawn-dusk asymmetries in the coupled Solar wind-magnetosphere-ionosphere system*, Geospace Revisited: a Cluster/MAARBLE/Van Allen Probes Conference, Rhodes, Greece, Sep. 15–20, 2014 (invited talk).

J. Warnecke, *Bipolar Magnetic Flux Concentration due to Stratified Turbulence and Dynamo action*, 15th MHD days, Potsdam, December 2-3, 2014 (oral).

J. Warnecke, P. J. Käpylä, M. J. Käpylä, and A. Brandenburg, *Dynamo driven coronal ejections*, ICS Forum talk, School of Science, Aalto University, Finland, August 18, 2014 (oral).

J. Warnecke, P. J. Käpylä, M. J. Käpylä, and A. Brandenburg, *Recent results of global convective dynamo simulations*, HELASVI, Max-Planck-Institute for Solar System Research, Göttingen, Germany, September 2, 2014.

J. Warnecke, P. J. Käpylä, M. J. Käpylä, and A. Brandenburg, *The importance of a coronal envelope for modeling the global turbulent dynamo of the Sun, Coupling and dynamics of the solar atmosphere*, IUCAA, Pune, India, November 10-14, 2014.

J. Warnecke and **H. Peter**, *Magnetic field lines in 3D MHD models of the solar corona*, Max-Planck/Princeton Center for Plasma Physics, General Meeting, Berlin, Germany, June 25, 2014 (oral).

Y. Wei, **M. Fränz**, **E. Dubinin**, W. Wan, R. Jarvinen, T.-L. Zhang, S. Barabash, and R. Lundin, *Ablation of Venusian oxygen ions by unshocked solar wind*, European Geosciences Union General Assembly, Vienna, Austria, Apr 27-May 2, 2014 (oral).

G. Wen, R. F. Cahalan, D. H. Rind, J. Jonas, P. Pilewskie, J. W. Harder, and **N. Krivova**, *GISS GCMAM Modeled Climate Responses to Total and Spectral Solar Forcing on Decadal and Centennial Time Scales*, American Geophysical Unions 47th annual Fall Meeting, San Francisco, California, US, December 15-19, 2014 (poster).

F. Widmer, **J. Büchner**, N. Yokoi, and W. Schmidt, *Influence of turbulence on the reconnection rate*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (poster).

T. Wiegelmann, *NLFFF-2014: Field-of-view experiments in Cartesian and spherical geometry*, NLFFF Team meeting, Bern, Switzerland, Jan 13-16, 2014 (oral).

T. Wiegelmann and Sunrise team, *Selfconsistent magnetostatic modelling of the solar atmosphere from Sunrise/IMAX measurements*, AG Annual Meeting 2014, Bamberg, September 22-26, 2014 (oral).

C. Wilson, H. Svedhem, P. Drossart, G. Piccioni, **W. J. Markiewicz**, M. Pätzold, D. Titov, and J.-L. Bertaux, *A dynamic atmosphere revealed by the Venus Express mission*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014.

R. Yadav, *Formation of starspots in self-consistent global dynamo models*, MHD Days, AIP, Potsdam, Germany, Dec 2-3, 2014 (oral).

R. Yadav, *Spontaneous formation of cool polar-spots in global dynamo simulations*, CoolStars 18, Flagstaff, Arizona, USA, June 9-13, 2014 (oral).

S. Yang, **J. Büchner**, J. C. Santos, and H. Zhang, *Modeling the relative magnetic helicity in MHD simulations and its application to solar activity*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (invited talk).

S. Yang, H. Zhang, and **J. Büchner**, *Magnetic helicity distribution in the solar atmosphere*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014.

K. L. Yeo, **N. A. Krivova**, and **S. K. Solanki**, *Reconstruction of TSI and SSI in the satellite era*, EGU General Assembly 2014, Vienna, Austria, May 2, 2014 (invited talk).

K. L. Yeo, **S. K. Solanki**, and **N. A. Krivova**, *Solar irradiance variability and the Earth's climate*, SCOSTEP's 13th Quadrennial Solar-Terrestrial Physics Symposium, Xi'an, China, Oct 15, 2014 (invited talk).

J. Yu, L. Berger, R. Wimmer-Schweingruber, B. Heber, **M. Hilchenbach**, and **R. Kallenbach**, P. Bochsler, and P. Klecker, *The Variability of Suprathermal Pickup He+ Measured with SOHO/CELInstitut d'Astrophysique Spatiale/STOF*, AGU Fall Meeting, San Francisco, CA, US, Dec 15-19, 2014.

X. Zhou, **J. Büchner**, M. Barta, W. Gan, and S. Liu, *Particle acceleration by cascading reconnection in the solar corona*, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014 (poster).

Number of entries: 283

5. Seminare / *Seminars*

MPS Seminar und Kolloqium */ MPS Seminar and Colloquium*

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

Anna Manalushenko (Lockheed Martin Solar and Astrophysics Laboratory,Palo Alto, USA), Models of the Coronal Magnetic Field, as Guided by EUV Observations, Before and After a Major Eruption, 10 Jan 2014

Frank Hill (National Solar Observatory, Sacramento Peak, Sunspot, USA), Helioseismology from the Global Oscillation Network Group, 13 Feb 2014

Hans-Peter Dörr (Kiepenheuer-Institut für Sonnenphysik, Freiburg, Germany), Precision Solar spectroscopy with a frequency comb calibration system at the VTT, 26 Feb 2014

Ivan Milic (Astronomical Observatory Belgrade, Serbia), Inferring depth-dependent quiet Sun magnetic fields by means of Hanle effect, 27 Feb 2014

Tetsu Anan (Kwasan and Hida Observatories, Kyoto University, Japan), Solar spectropolarimetric observations of the multi spectral lines, 4 Mar 2014

Saskia Hekker (MPS), Towards accurate ages of stars using asteroseismology, 13 Mar 2014

Marissa Vogt (University of Leicester, UK), Jupiter´s Dynamic Magnetosphere, 13 Mar 2014

Mark Cheung, (Lockheed Martin Solar and Astrophysical Laboratory, Palo Alto, USA), Data-Driven Modeling of Magnetic Field Evolution in the Solar Corona, 19 Mar

Reiner Arlt (Leibniz-Institut für Astrophysik, Potsdam, Germany), Magnetic Dynamos and Instabilities across the HR diagram, 26 Mar 2014

Christoffer Karoff (Aarhus University, Denmark), Understanding Solar Variability using Cosmogenic Isotopes and Stars, 1 Aprl 2014

Damian Fabbian (Instituto de Astrofísica de Canarias, La Laguna, Tenerife, Spain), 3D MHD simulations and non-LTE spectra: modern tools for studying the Sun's composition and irradiance, 25 Ap 2014

Rob Rutten (Lingezicht Astrophysics, Deil, The Netherlands), Ellerman bombs, 30 Apr 2014

Coralie Neiner, (Observatoire de Paris, Meudon, France), UVMag: UV and optical spectropolarimetry for stellar investigations, 5 May 2014

Tilmann Dannert (Max-Planck Rechenzentrum, Garching, Germany), Strategies for hybrid parallelization of a spherical MHD code, 14 May 2014

Hui Tian (Smithsonian Astrophysical Observatory, Cambridge, USA), Extreme UV spectroscopy from the chromosphere to the corona of the Sun, 15 May 2014

Rob Rutten (Lingezicht Astrophysics, Deil, The Netherlands), Halpha: unique thanks to its cool gap and its hot memory - with a twist?, 15 May 2014

Sarbani Basu (Yale University, New Haven, USA), What we saw in the deep solar minimum and beyond, 22 May 2014

Ting Li (National Astronomical Observatory, Beijing, China), Flux ropes and cyclones from SDO observations, 27 May 2014

Alan Fitzsimmons (Queen´s University, Belfast, N. Ireland), Discussions on Comets, 03 Jun 2014

Maarit Mantere (Aalto University, Helsinki, Finland), Cyclic magnetic activity due to turbulent convection, 12 Jun 2014

Stamatios M. Krimigis (Academy of Athens, Greece / Applied Physics Laboratoty, Johns Hopkins University, Baltimore, USA), The Voyager Odyssey: From Earth to the Galaxy in 35 years, 18 Jun 2014

Andrew Youdin (University of Arizona, Tucson, USA), Discussions on Comets, 25 Jun 2014

Elena Grigorenko (Space Research Institute, Russian Academy of Sciences, Moscow, Russia), A possible mechanism of a guide magnetic field increase due to kinetic effects of ion dynamics in the magnetotail current sheet, 26 Jun 2014

Petri Käpylä (University of Helsinki, Finland), Capturing solar and stellar activity with computers -- dynamo waves and cycles from simulations, 8 Jul 2014

Humberto Campins (Central University of Florida, Orlando, USA), Can Asteroid 4015 Wilson-Harrington Produce Meteorites from 24 Themis?, 8 Jul 2014

Humberto Campins (Central University of Florida, Orlando, USA), Water and Organic Molecules on Asteroids and on Earth, 8 Jul 2014

Anders Johansen (Lund University, Sweden), Asteroid formation by chondrule accretion, 9 Jul 2014

Julia Thalmann (University of Graz, Austria), Force-free modeling of magnetic energy and twist in the solar atmosphere, 16 Jul 2014

Sebastian Höfner (MPS), Heat transport phenomena in the outer layers of cometary nuclei, 23 Jul 2014

Pankaj Kumar (Korea Astrononomy and Space Science Institute, Deajeon, Korea), Reflecting MHD waves in hot coronal loops observed by SDO/AIA, 25 Jul 2014

Victor Silva (Aarhus University, Denmark), Asteroseismology, Exoplanets, and Galactic Archaeology: intriguing matches along the (Milky) way, 17 Sep2014

Theresa Lüftinger (University of Vienna, Austria), Magnetic fields of stars and their influence on the habitability of Exoplanets, 7 Oct 2014

Luis Vieira (Instituto Nacional de Pesquisas Espaciais, São Paulo, Brasil), Evolution of the Solar Luminosity during Solar Cycle 23, 9 Oct 2014

Rock Bush (Stanford University, USA), The Constant Sun: Measuring the Solar Radius and Oblateness with the Helioseismic and Magnetic Imager, 13 Oct2014

Lokesh Bharti (Mohanlas Sukhadia University, Udaipur, India), High resolution spectropolarimetric study of sunspot light bridges, 15 Oct 2014

Lei Ni (Yunnan Observatories, Kunming, China / Universität Potsdam, Germany), Fast magnetic reconnection in the solar chromosphere mediated by the plasmoid instability, 23 Oct 2014

Avijeet Prasad (Indian Institute of Astrophysics, Bangalore, India), Separable solutions of force-free spheres and applications to solar active regions, 27 Oct 2014

Tim Brown (Las Cumbres Observatory, Goleta, USA), Dancing with the Stars: How Do They Spin the Way They Do?, 18 Nov 2014

Dieter Nickeler (Astronomical Institute, Ondřejov, Czech Republic), Fragmented currents induced by shear flows as heating and dissipation mechanisms in flares and the quiet solar atmosphere, 21 Nov 2014

Hans Zinnecker (SOFIA Science Center, USA / Deutsches SOFIA Institut, Stuttgart, Germany), SOFIA - past, present, and future, 10. Dec 2014

Jie Jiang (National Astronomical Observatory, Beijing, China), Primary cause of the extended cycle 23 minimum, 16 Dec 2014

Rafael Manso Sainz (Instituto de Astrofísica de Canarias, La Laguna, Tenerife, Spain), Spectropolarimetry for solar magnetometry, 18 Dec 2014

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

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

Robert Cameron, Deep convection and supergranulation, 7 Jan 2014

Udo Schühle, Design and space qualification of a VUV telescope mirror for Solar Orbiter SPICE, 14 Jan 2014

Werner Curdt, SUMER observations of comet ISON during perihelion, 18 Feb 2014

Timo Reinhold (Institute for Astrophysics, University of Göttingen), Stellar Rotation in the Kepler era - From rotation periods to stellar ages, 18 Mar 2014

Leping Li, Conversion from mutual helicity to internal helicity observed by IRIS, 1 Apr 2014

Luca Teriaca, Development of the Visible and FUV cameras of the METIS coronagraph aboard Solar Orbiter, 8 Apr2014

Thomas Wiegelmann, Selfconsistent magnetostatic modelling of the mixed plasma-beta solar atmosphere, 15 Apr 2014

Tim White, Measuring Stellar Properties with Asteroseismology and Interferometry, 29 Apr 2014

Robert Cameron, Inferring the Sun's subsurface toroidal field, 3 Jun 2014

Manfred Schüssler, Stellar magnetic activity: is Rossby number really the key?, 24 Jun 2014

K.M. Vamsikrishna (Indian Institute of Technology, Bhubaneswar, India), Evolution of the small-scale magnetic flux from HMI observations, 15 Jul 2014

Kok Leng Yeo, Analysis and modelling of solar irradiance variations, 22 Jul 2014

Hardi Peter, Scaling of coronal emission with activity, 29 Jul 2014

Lijia Guo, Plasma instabilities in large scale magnetic reconnection associated with eruptive solar coronal events, 12 Aug 2014

Werner Curdt, Solar and galactic cosmic rays detected by SoHO, 2 Sep 2014

Anusha Bhasari, Evolution of quiet-Sun small-scale magnetic features using Sunrise observations, 16 Sep 2014

Michiel van Noort, Integral field spectroscopy using microlenses, 30 Sep 2014

Radoslav Bukic, Discovery of long-lasting energetic ion sources on the Sun, 14 Oct 2014

Thierry Dudok de Wit (Université d´Orléans, France), The solar butterfly diagram: from a low-dimensional model to new proxies of solar activity, 27 Oct 2014

Johann Hirzberger, The PHI instrument on Solar Orbiter, 28 Oct 2014

Benjamin Beeck, 3D MHD simulations of stellar magnetoconvection, 4 Nov 2014

Bernd Inhester, Towards resolving the velocity distribution inside CMEs, 18 Nov 2014

Joaquim Loizum (Princeton Plasma Physics Laboratory, Princeton, USA), Magnetic Islands and Singular Currents at Rational Surfaces in Three-dimensional MHD Equilibria, 08 Dec 2014

Jörn Warnecke, Understanding the solar dynamo from global convective dynamo simulations, 09 Dec 2014

Li Feng, 3D morphological evolution of CMEs and shocks and their link to in-situ observations, 16 Dec 2014

Seminar der Planetengruppe am MPS / *MPS Planetary Group Seminar*

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

Jean-Baptiste Vincent, Dennis Bodewits, Direct evidence of impact surface alternation on the asterois (596) Scheila, 26 Mar 2014

Colin Snodgrass, Discovery of the first ring system around a minor body, 7 Apr 2014

Hermann Böhnhardt, Castalia – A European Mission to a Main Belt Comet, 8 Apr 2014

Elias Roussos, The mass of Saturn´s main ring system from energetic charged particle measurements, 16 Apr 2014

Michael Küppers (European Space Agency, Madrid, Spain), Is dwarf planet (1) Ceres a comet?, 5 May 2014

Yohai Kaspi (Weizmann Institute of Science, Rehovot, Israel), Inferring the depth of the jet streams on Jupiter and Saturn through gravity measurements by Juno and Cassini, 20 May 2014

Elena Kronberg, Circulation of Heavy Ions in the Magnetosphere, 27 May 2014

Joachim Saur (Institut für Geophysik und Meteorologie, Universität Köln, Germany), A subsurface ocean in Ganymede from HST observations and modeling of its aurora, 17 Jun 2014

Jessica Agarwal, Recently discovered dust activity on active asteroids, 17 Jul 2014

Andrew Steele (Geophysical Laboratory, Carnegie Institution of Washington, USA), Macromolecular carbon: its nature, provenance and role in the detection of life and non life processes, 23 Jul 2014

Sebastian Höfner, Heat transport phenomena in the outer layers of cometary nuclei, 23 Jul 2014

Andrew Steele (Geophysical Laboratory, Carnegie Institution of Washington, USA), The search for life on Mars, a search on two planets, 5 Aug 2014

Jessica Sunshine (University of Maryland, College Park, USA), The Flybys of Comets Tempel 1 and Hartley 2, 20 Aug 2014

Marco Fulle (Osservatorio Astnonomico di Trieste, Italy), Bound grains orbiting 67P: are we sure of that?, 17 Sep 2014

Matthew Izawa (University of Winnipeg, Canada), A Meteorite Science View of Comets and the Rosetta Mission, 08 Oct 2014

Ladislav Rezac, Evolution of activity of 67P/CG from water vapor measurements of MIRO instrument, 17 Oct 2014

Wojciech J. Markiewicz, Morphology, dynamics and physical properties of the Venus upper clouds from imaging with Venus Monitoring Camera on Venus Express, 28 Oc 2014

Andreas Pack (Universität Göttingen, Germany), Using oxygen isotopes in planetary sciences, 6 Nov 2014

Klaus Jockers, Fundamentals on light scattering, absorption and thermal radiation, and its relation to the vector radiative transfer equation, 11 Nov 2014

Ingo Müller-Wodarg (Imperial College London, UK), Titan's chaotic upper atmosphere, 20 Nov 2014

Walter Götz, The Curiosity Rover Mission to Mars, 9 Dec 2014

Rosetta Seminar am MPS / *MPS Rosetta Seminar*

Vorträge von Mitgliedern der Rosetta Gruppe und externen Vortragenden / *Talks by members of the Rosetta group and external speakers*

Jessica Agarwal, Harald Krüger, Paul Hartogh, Detection of large cometary dust grains with Rosetta, 14 Feb 2014

Jürgen Blum (Institut für Geophysik und Extraterrestrische Physik, Technische Universität Braunschweig, Germany), Comets as test cases for planetesimal-formation scenarios, 21 Feb 2014

Matthew Knight (Lowell Observatory, Flagstaff, USA), Sungrazing comets, 26 Feb 2014

Karl- Heinz Glassmeier (Institut für Geophysik und extraterrestrische Physik, Technische Universität Braunschweig, Germany), Interaction of Comets With the Solar Wind - Current Knowledge and ROSETTA Perspectives, 28 Feb 2014

Thomas Albin, Harald Krüger, The Dust Impact Montior on-board Philae - Laboratory measurements with cometary analogue materials, 14 Mar 2014

Urs Mall, Axel Korth, Nitrogen and Noble Gases in comets, 21 Mar 2014

Thomas Stephan (University of Chicago, USA), Stardust - what have we learned and open questions, 13 May 2014

Reinhard Roll, The Rosetta Lander Anchor System, 16 May 2014

Konrad J. Kossacki (Intitute of Geophysics, University of Warsaw, Poland), Sublimation coeefficient of H2O ice and its influence on the evolution of comet nuclei, 28 May 2014

Fernando Javier Capalbo (Laboratoire Inter-universitaire des Systèmes Atmosphériques, Paris, France), Titan's upper atmosphere composition and temperature from Cassini/UVIS stellar and solar occultations, 2 Jun 2014

Sihane Merouane, Relationships between organics and silicates in Interplanetary Dust Particles: insights into the early stages of the Solar nebula, 3 Jun 2014

Dieter E. A. Nürnberger (European Southern Observatory, Chile), The formation of High Mass Stars in Dense Star Cluster Environments, 4 Jun 2014

Walter Arnold (Saarland Universität, Saarbrücken, Germany), Non-Destructive Materials Characterization applied to SESMAE/DIM and CASSE Wave Propagation and Landing Impact Signals, 13 Jun 2014

Norbert Kömle **(**Austrian Academy of Science, Vienna, Austria), Local processes on the cometary surface - what will Philae await on November 11, 27 Jun 2014

Marco Fulle (Osservatorio Astronomico di Trieste, Italy), 67P Dust environment from GIADA and OSIRIS data, 16 Sep 2014

Hermann Böhnhardt, Reinhard Roll, Update on Philae landing sequence and planned science, 24 Oct 2014

Fred Goesmann, Last MS spectrum prior to crash, 31 Oct 2014

IMPRS Solar System Seminar (S^3 Seminar)

Typisch drei Vortäge von Doktoranden über das Thema ihrer Doktorarbeit, manchmal ergänzt durch Votrag eines externen Vortragenden
Typically three talks by students about their PhD project, sometimes complemented by a talk of an external speaker

Patricio Munoz, Kinetic simulations of current sheets: anisotropic heating and guide field effects, 22 Jan 2014

Rakesh Yadav, Scaling laws for compressible spherical shell dynamos, 22 Jan 2014

Andrea Boßmann, Magnetic field generation in the ice giants: The effect of stable stratification, 28 Jan 2014

Feng Cheng, Formation of an active region corona driven by magnetic flux emergence, 5 Feb 2014

Francisco Iglesias, Design and performance characterization of the Fast Solar Polarimeter, 5 Feb 2014

Manfred Schüssler, Good scientific practice - Ethical issues in the research environment, 25 Mar 2014

Julie Brisset, A Microgravity Sounding-Rocket Experiment on Protoplanetary Dust Aggregation, 16 Apr 2014

Krzysztof Barczynski, Relating miniature structures in the corona to the photosphere, 14 May 2014

Jack Carlyle, Probing the Density and Magtnetic Fields of Erupted Solar Filament Plasma, 28 May 2014

Domenico Meduri, Reversals in Geodynamo Models: a Statistical Approach, 28 May 2014

Anna Kotova, Studying the Saturn Inner Radiation Belt, 16 Jun 2014

Leonardo Regoli, Mapping the Flow of Energetic Particles in Titan's Exobase, 16 Jun 2014

Fernandez Ricardo Gafeira, Thermal models of the Polarimetric Helioseismic Imager (PHI) on board of Solar Orbiter, 16 Jun 2014

Theodosios Chatzistergos, Analysis of Historical Ca II K Images for Solar Activity Studies, 25 Jun 2014

Jakob Deller, Simulating Impacts on Rubble Pile Asteroids, 25 Juni 2014

Stefan Barra, Coronal Active Region Modeling Based on SDO Data, 9 Jul 2014

Nafiseh Masoumzadeh, Surface Reflectance Analysis of Small Bodies, 23 Jul 2014

Xuanyu Hu, Observing and Modeling Mass Loss on Cometary Nuclei, 23 Jul 2014

Chaitanya Giri, The Organic Composition of Cometary Nucleus, the COSAC Experiment on Philae Lander, 23 Jul 2014

Farhad Shakeri, Solar VUV variability of the quiet Sun, 22 Oct 2014

Adam Pluta, Empirical data analysis and modeling for extrem geomagnetic storm correlating earth directed coronal mass ejection dynamics obtained through non-multipoint observations , 22 Oct 2014

Rakesh Yadav, Modelling starspots using computer simulations, 22 Oct 2014

Martin Bo Nielsen, Asteroseismic determination of internal rotation in Sun-like stars, 5 Nov 2014

Malte Venzmer, Analysis of plasma and magnetic field solar wind data and extrapolation modeling for deriving near-sun estimates based on empirical data analysis, 5 Nov 2014

Sijie Yu, Nonlinear force-free modeling of coronal magnetic fields, 5 Nov 2014

Feng Chen, Coronal dynamics driven by magnetic flux emergence, 11 Nov 2014

Jan Langfellner, Spatially resolved vortices in supergranules, 03 Dec 2014

Fernando Ricardo Gafeira, Temporal variations in small scale chromospheric fibrils observed by Sunrise, 03 Dec 2014

Björn Löptien, Helioseismology with Solar Orbiter, 10 Dec 2014

Atefeh Barekat, The radial gradient of the near-surface shear layer of the Sun, 10 Dec 2014

David Martin Belda, Surface Flux Transport Simulations: Effect of in ows and random velocities on the evolution of the Sun's large scale magnetic field, 10 Dec 2014

6. Lehrtätigkeit / *Lectures*

Vorlesungen von MPS-Wissenschaftlern an Universitäten und anderen Institutionen
Lectures of MPS scientists at universities and other institutions

Aaron Birch: Data Analysis and Inverse Problems for Helioseismology, DWIH Indo-German, Winter School for Astrophysics, 03 – 07 Nov 2014

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

Physics of the Sun, Heliosphere and Space Weather: Space Weather Applications, Georg-August-Universität Göttingen, Germany, SS 2014

Numerical Simulation of Solar processes, Lima, Peru, Sep 2014

Laurent Gizon: Physics of the Interior of the Sun and Stars, Georg-August-Universität Göttingen, Germany, WS 2013/14

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

Numerical Experiments in Stellar Physics, Georg-August-Universität Göttingen, Germany, SS 2014

Laurent Gizon (with A. Birch): Data Analysis in Astrophysics, Georg-August-Universität Göttingen, Germany, SS 2014

Lurent Gizon (with S. K. Solanki, A. Gandorfer, D. Innes, A. Lagg, H. Peter, J. Schou, S. Schuh, H. Schunker): Solar System Science: The Central Star, Georg-August-Universität Göttingen, WS 2013/14 and WS 2014/15

Stein Haaland: Polar Magnetospheric Substorms, UNIS Svalbard, Norway, WS 2014/15

Klaus Jockers (with H.Krüger): Entstehung von Sonnensystemen, Georg-August-Universität Göttingen, Germany, WS 2013/14

Reinald Kallenbach: Plasma Physics - Advanced Course in the Master Programme, University of Bern, SS 2014

Andreas Nathues: Einführung in das Planetensystem, Universität Clausthal, WS 2014/15

Hardi Peter: Good scientific practice: Ethical issues in the research environment, Georg-August-Universität Göttingen, Germany, WS 2014/15

Hardi Peter (with Jörn Warnecke): Solar and stellar activity, Georg-August-Universität Göttingen, Germany, WS 2013/14, SS 2014

Manfred Schüssler: Good Scientific Practice: Ethical issues in the research environment, Georg-August-Universität Göttingen, Germany, WS 2013/14

Sonja Schuh, Sami K. Solanki: Carreer Development Workshop, Georg-August-Universität Göttingen, Germany, WS 2014/15

Sami K. Solanki: How to write a scientific paper, Georg-August-Universität Göttingen, Germany, WS 2013/14, WS 2014/15

7. Tagungen und Workshops / *Conferences and workshops*

7.1 Organisation von Tagungen und Workshops *Organization of conferences and workshops*

Matthias Ammler-von-Eiff: HELAS VI / SOHO 28 / SPACEINN International Conference, MPS Göttingen, Germany, 01 – 05 Sep 2014.

Anusha Bhasari: COST Action MP1104 – Polarization as a tool to study the Solar System and beyond, WG2 Meeting: Theory and Modeling of polarization in Astrophysics, Prague, Czech Republic, 05 – 08 May 2014.

Aaron Birch: HELAS VI / SOHO 28 / SPACEINN International Conference, MPS Göttingen, Germany, 01 – 05 Sep 2014.

Hermann Böhnhardt: Asteroids, Comets, Meteors 2015, Helsinki, Finland, 30 Jun – 04 Jul 2014.

Jörg Büchner: Workshop "Magnetic reconnection", Berlin, Germany, 14 Jun 2014.

Ulrich Christensen: Stellar & Planetary Dynamos, Göttingen, Germany, 26 – 29 May 2014.

Patrick Daly: 20th Cluster Cross-Calibration Meeting, MPS Göttingen, Germany, 15– 17 Oct 2014.

Laurent Gizon: HELAS VI / SOHO 28 / SPACEINN International Conference, MPS Göttingen, Germany, 1 – 5 Sep 2014.

14th European Solar Physics Meeting, Dublin, Ireland, 8 – 12 Sep 2014.

PLATO 2.0 Science Conference, Taormina, Italy, 3-5 December 2014

Saskia Hekker: Peakbagging workshop, Birmingham, UK, 28-31 Jul 2014.

Hardi Peter: 14th European Solar Physics Meeting, Dublin, Ireland, 8 – 12 Sep 2014.

Miriam Rengel: Herschel HIFI ICC Meeting, MPS Göttingen, Germany, 27 – 30 Oct 2014.

Elias Roussos: Cassini MAPS workshop 2014, Göttingen, Germany, 18 – 20 Jun 2014.

Sonja Schuh: HELAS VI / SOHO 28 / SPACEINN International Conference, MPS Göttingen, Germany, 01 – 05 Sep 2014.

Meeting of the German Astronomical Society (AG), Bamberg, Germany, 22 – 26 Sep 2014.

Jörn Warnecke: The 10th Pencil-Code User Meeting, Göttingen, Germany, 07 – 11 Jun 2014.

Sami K. Solanki: International Conference on Dynamics and Coupling of the Solar Atmosphere, Pune, India, 10 - 14 Nov 2014.

18th Cambridge Workshop on Cool Stars, Stellar Systems and the Sun, Flagstaff AZ, USA, 08 – 13 Jun 2014.

7.2 Convener bei wissenschaftlichen Tagungen
Convener during scientific meetings

Jörg Büchner: EGU General Assembly, Symposium “Theory and Simulation of Solar System Plasmas”, Vienna, 27 Apr – 2 May 2014.

COSPAR General Assembly, Symposium “Magnetic reconnection from the Sun to galaxies”, Moscow, Russia, 2 – 10 Aug 2014.

Laurent Gizon: HELAS VI / SOHO 28 / SPACEINN International Conference, MPS Göttingen, Germany, 01 - 05 September 2014.

Paul Hartogh: AOGS 9th Annual Meeting, Sapporo, Japan, 28 Jul – 1 Aug 2014

Sakia Hekker, CoRoT-3 and Kepler KASC-7 joint meeting, Toulouse, France, 06 – 11 Jul 2014

Martin Hilchenbach: COSIMA science team meeting, Paris, France, Sep 2014; Göttingen, Germany, Oct 2014; Schwetzingen, Germany, Dec 2014.

Miriam Rengel: AOGS 9th Annual Meeting, Studies of Small Solar System Bodies and Insight into Planetary System Formation, Sapporo, Japan, 28 Jul – 1 Aug 2014.

Cassini MAPS workshop 2014, Göttingen, Germany, 18 – 20 Jun 2014

Elias Roussos: EGU General Assembly, Symposium “Symposium Radiation Belt Dynamics”, Vienna, 27 Apr – 2 May 2014.

Cassini MAPS workshop 2014, Göttingen, Germany, 18 – 20 Jun 2014.

Sonja Schuh: Meeting of the German Astronomical Society (AG), Bamberg, Germany, 22 – 26 Sep 2014.

Sami K. Solanki: IAU Symposium 305, Polarimetry: From the Sun to Stars and Stellar Environments, Punta Leona, Costa Rica, 30 Nov – 05 Dec 2014.

International Conference on Dynamics and Coupling of the Solar Atmosphere, Pune, India, 10 – 14 Nov 2014.

Jörn Warnecke: 15th MHD days, Potsdam, Germnany, 02 – 03 Dec 2014.

Johannes Wicht: EGU General Assembly, Symposium “Planetary Magnetic Fields and Interior Dynamics”, Vienna, 27 Apr – 2 May 2014.

Thomas Wiegelmann: DPG-Jahrestagung, Session Sun and Heliosphere, Berlin, Germany, 17 - 21 March 2014

8. Gutachtertätigkeit / *Review work*

8.1 Gutachtertätigkeit für wissenschaftliche Zeitschriften

Reviews for scientific journals

Insgesamt wurden mehr als 160 Artikel für wissenschaftliche Zeitschriften von 43 Wissenschaftlern des MPS begutachtet.
In total more than 160 articles for scientific journals were reviewed by 43 different scientists of the MPS.

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

B. Beek, A. Birch, R. Bučik, J. Büchner, R. Cameron, U. Christensen, P. Daly, T. Duvall, A. Feller, M. Fränz, A. Gandorfer, W. Götz, S. Haaland, P. Hartogh, S. Hekker, M. Hilchenbach, J. Hirzberger, B. Inhester, D. Innes, B. Knapmeyer-Endrun, N. Krishnappa, N. Krivova, E. Kronberg, H. Krüger, N. Krupp, A. Lagg, U. Mall, H. Peter, E. Roussos, J. Schou, U. Schühle, M. Schüssler, S. Schuh, H. Schunker, A. Shapiro, M. van Noort, V. Vasyliunas, J.-B. Vincent, S. Warnecke, J. Wicht, T. Wiegelmann, K. Wilhelm

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

Astronomy & Astrophysics (25)
Journal of Geophysical Research (20)
Astrophysical Journal (17)
Solar Physics (13)
Advances in Space Research (10)
Planetary & Space Science (9)
Annales Geophysicae (9)
Icarus (8)
Monthly Notices of the Royal Astronomical Society (5)
Nature (3)
Space Science Reviews (3)
Geophysical Research Letters (3)
Nonlinear Processes in Geophysics (3)

Physics of Plasmas; Astrophysical Journal Letters; Science; Geophysical and Astrophysical Fluid Dynamics (2 each)

Advanced Optical Technologies; Applied Optics; Astronomy and Computing; Astrophysics and Space Science; Bulletin of Earthquake Engineering; Earth & Planetary Science Letters; Earth, Planets and Space; Geophysical Journal International; Journal of Asian Earth Sciences; Journal of Atmospheric and Solar-Terrestrial Physics; Journal of Climate; Journal of Fluid Mechanics; Journal of Space Weather and Space Climate; Optical Materials Express; Physical Review Letters; Physics, Mechanics & Astronomy; Physics of the Earth & Planetary Interiors; Publications of the Astronomical Society of Japan; Science China, Review of Scientific Instruments; Surveys in Geophysics; Tectonophysics; The Astronomical Journal; Transactions on THz Science and Technology; (1 each)

8.2 Gutachtertätigkeit für Vorschläge und Anträge

Reviews of proposals

Insgesamt wurden 88 Vorschläge und Anträge von 13 Wissenschaftlern des MPS begutachtet.
In total 88 proposals were reviewed by 13 different scientists of the MPS.

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

J. Büchner, U. Christensen, W. Götz, P. Hartogh, S. Hekker, D. Innes, M. Rengel, E. Roussos, M. Schüssler, S. Schuh, S. K. Solanki, J. Wicht, T. Wiegelmann

Organisation (Anzahl Gutachten)/ *Organization (number of reviews):*

DFG (German Science Foundation), Germany (40)

SRAC (Swedish National Space Board), Sweden (14)

Research Council of Norway (10)

NASA, USA (4)

Humboldt Foundation, Germany (3)

UK Space Agency, UK; FWO (Fonds Wetenschappelijk Onderzoek), Belgium; F.R.S.-FNRS (Fonds de la Recherche Scientifique), Belgium (2 each)

ANR (Agence nationale de la recherche), France; Czech Science Foundation, Czech republic; DAAD (German Academic Exchange Service), Germany; ENS (École Normale Supérieure), France; ESA; Hungarian Space Fund; INCITE, USA; Leibnitz Association, Germany; National Science Foundation, USA; NRS, South Africa; Österreichisches Institut für Wissenschaft und Technology (IST), Austria; Royal Society, UK; University of California Los Angeles, USA (1 each)

9. Herausgebertätigkeit / *Editorship*

Regina Aznar Cuadrado: Living Reviews in Solar Physics (Scientific Copy Editor)

Aaron Birch: Solar Physics Topical Issue “The Many Scales of Solar Activity in Solar Cycle 24 as seen by SDO.” (Guest Editor)

Hermann Böhnhardt: Earth, Moon and Planets (Editorial board)

Jörg Büchner: Nonlinear Processes in Geophysics (Topical Editor)

Advances in Space Research (Associate Editor)

Ulrich Christensen: Physics of the Earth & Planetary Interiors (Editorial board)

Laurent Gizon: Solar Physics (Editorial board)

Natalie Krivova: Journal of Space Weather and Space Climate (Editorial board)

Journal of Space Weather and Space Climate Special Issue "Solar variability, solar forcing, and coupling mechanisms in the terrestrial atmosphere" (Editor)

Hardi Peter: Astronomy & Astrophysics (Editor)

Elias Roussos: Annales Geophysicae (Editor)

Manfred Schüssler: Living Reviews in Solar Physics (Editorial board)

Alexander Shapiro: Journal of Space Weather and Space Climate Special Issue "Solar variability, solar forcing, and coupling mechanisms in the terrestrial atmosphere" (Editor)

Sami K. Solanki: Editor-in-Chief ”Living Reviews in Solar Physics“

Editorial board ”Solar Physics“

Johannes Wicht: International Journal of Geomathematics (Editor)

10. Mitgliedschaft in wissenschaftlichen Gremien / *Membership in scientific councils*

Jörg Büchner: Space Research Advisory Board of the Swedish National Space Board (SNSB)

International Working group "Living with a Star" (ILWS) – German representative

Member DFG (German Science Foundation) Fachkollegium 311 (Astrophysics)

Steering Committee of the Max Planck Princeton Center for Plasma Physics

***Ulrich Christensen*:** Steering Board of the Collaborative Research Center (SFB 963) "Astrophysical Flow Instabilities and Turbulence"

Board Member, Göttingen Research Council

Advisory Board of SEDI (Study of the Earth's Deep Interior, Union Committee of the International Union of Geophysics and Geodesy)

Committee for high pressure research in the geosciences of the Bavarian Academy of Sciences (Advisory Board to the Bayerisches Geoinstitut, Bayreuth)

Chairman, Committee for the Edition of Georg Christoph Lichtenberg's Scientific Writings of the Göttingen Academy of Sciences

Philae (Rosetta Lander) Steering Committee

Laurent Gizon: Board Member, PLATO Mission Consortium

Coordinator, PLATO Data Center

Member of PLATO Science Advisory Team (ESA)

Collaborator, NASA SDO Science Center (Helioseismology)

Board Member, European Helio- and Asteroseismology Network

Elected Board Member, European Solar Physics Division (European Physical Society)

Board Member, Göttingen Research Council

Board Member of SpaceInn, a European Collaborative Network

Paul Hartogh: ALOMAR Scientific Advisory Committee (ASAC)

Herschel Users' Group (HUG)

JUICE Science Working Team

Saskia Hekker: Organizing Committee of IAU Commission 27 (Variable Stars)

Natalie Krivova: Organising Committee of the IAU Commission 12 "Solar Radiation and Structure"

Hardi Peter: Board of the Solar Physics Division (SPD) of the European Physical Society (EPS)

Miriam Rengel: NASA Lunar Science Institute (NLSI)

Jasper Schou: SPD/AAS nominating committee

Sonja Schuh: Counselor to the Executive Committee of the German Astronomical Society (AG)

Staff member and Board member of the DFG (German Science Foundation) research training group GRK 1351

Sami K. Solanki: Space Science Advisory Committee (SSAC) of ESA

Chairman of the of the Space Research Committee of DLR (German Aerospace Center)

Program Commission "Extraterrestrial Physics" of DLR

Permanent representative of the President of the MPG in the Senate of DLRNational Representative of SCOSTEP (Scientific Committee for Solar Terrestrial Physics)

Scientific Advisory Committee of the Instituto de Astrofísica de Canarias (IAC)

Scientific Advisory Committee of the Istituto Ricerche Solari Locarno (IRSOL)

Board Member of SOLARNET - High-Resolution Solar Physics Network

Steering Committee of the Max Planck Princeton Center for Plasma Physics

Johannes Wicht: Steering Committee of DFG (German Science Foundation) priority program ”Planetary magnetism”

Thomas Wiegelmann: Vice Chair of Arbeitsgemeinschaft Extraterrestrische Forschung (AEF)

Head of Commission on “Sun & Heliosphere” of AEF

Member of poster price committee of AEF

11. Auszeichnungen / *Awards*

Jakob Deller: Pierazzo International Student Travel Award 2014 of the Planetary Science Institut (for SPH modeling of impact events on non-spherical rubble-pile asteroid simulants).

Chaitanya Giri: Dieter-Rampacher-Preis 2014 of the Max Planck Society (for the youngest Max Planck PhD student who successfully completed his or her PhD-thesis in 2014).

Alexander Shapiro: Marie Curie Fellowship of the European Commission (2014-2016; Research project: Understanding the variability of solar and stellar radiative fluxes