EGU General Assembly 2011
Programme Group Programme
ST – Solar-Terrestrial Sciences

Monday, 04 April
GI-5
ST2.1
ST2.4/PS5.2
PS5.3/ST6.3

Tuesday, 05 April
ST2.2
ST2.3

Wednesday, 06 April
ST1.2
ST1.3
ST1.4

Thursday, 07 April
CL2.12
PS5.1
ST1.1
ST3.1
ST5.1/NH8.8
PS5.0/ST6.1

Friday, 08 April
NP6.1
ST3.2
ST3.4
ST4.1/PS10.1
NP6.4/ST6.4
NP6.6/ST6.5
Monday, 04 April

**GI-5 – Space Instrumentation, Planetary landers and Rovers (co-listed) – Orals**
Convener: Mark Leese | Co-Conveners: Peter Falkner, Lutz Richter, Günter Kargl

**Room: 42**
Chairperson: Mark Leese

13:30–13:45  
**EGU2011-6054**
Ari-Matti Harri, Walter Schmidt, Luis Vázquez, Harri Haukka, and Vladimir Linkin
Autonomous Operation of the MetNet Precursor Mission

13:45–14:00  
**EGU2011-9607**
Andrew Steele, Hans Amundsen, Liane Benning, Marilyn Fogel, Nicole Schmitz, and Amase 2010 team
The Arctic Mars Analogue Svalbard Expedition 2010.

14:00–14:15  
**EGU2011-11723**
Marek Tulej, Andreas Riedo, Maria Iakovleva, Vera A.S.M. Fernandes, and Peter Wurz
A miniature laser ablation time-of-flight mass spectrometer for sub-ppm analysis of planetary surfaces: performance studies

14:15–14:30  
**EGU2011-14094**
Juhaní Huovelin, Maria Genzer and the SIXS Team
An introduction to Solar Intensity X-ray and particle Spectrometer (SIXS) for BepiColombo

14:30–14:45  
**EGU2011-14100**
Lauri Alha, Juhaní Huovelin, and Hans Andersson
X-ray solar monitor equipped with a concentrator optics

14:45–15:00  
**EGU2011-14101**
Om Gupta
Iridium NEXT SensorPODs: Global Access for Earth Observation

**GI-5 – Space Instrumentation, Planetary landers and Rovers (co-listed) – Posters**
Convener: Mark Leese | Co-Conveners: Peter Falkner, Lutz Richter, Günter Kargl

**Hall A | Display Time 08:00–19:30**
Author in Attendance: 17:30–19:00
Chairperson: Gunter Kargl

A91  
**EGU2011-1294**
Valery Korepanov and Fedir Dudkin
Still one possibility to determine the wave vector onboard one spacecraft

A92  
**EGU2011-1800**
Glyn Collinson, Thomas Moore, David Durachka, David Olson, David Knudsen, Paul Rozmarynowski, Adrienne Beamer, and Jeffrey Klenzing
The Next Generation of Space Plasma Analyzer - Deployable Radial Imaging for Velocity, Energy, and Density (DRIVEN)

A93  
**EGU2011-2122**
Serhiy Belyavev and Nickolay Ivchenko
Digital Fluxgate Magnetometers, Trade-off Between Response, Sensitivity and Stability

A94  
**EGU2011-6330**
Miguel F. Cerdán and Marina D. Michelena
In orbit calibration of COTS AMR magnetic sensor

A95  
**EGU2011-6768**
Miguel F. Cerdán, Ana B. Fernández, Juan J. Jiménez, and Marina D. Michelena
Witnessing variations in the Earth magnetic field by means of Nanosat-1B COTS AMR magnetic sensor

A96  
**EGU2011-11562**
Manfred Sampf, Thomas Oswald, Helmut O. Rucker, Georg Fischer, Dirk Plettemeier, William S. Kurth, and Wolfgang Macher
First assessment of the JUNO/Waves antenna properties

A97  
**EGU2011-10002**
Hans Eichellerberger, Gustav Prattes, Konrad Schwingenschuh, Ghulam Jaffer, Özer Aydogar, Irmgard Jernej, Bruno Besser, Manfred Stachel, Tetsuya Tokano, and Peter Falkner
Acoustic outdoor measurements with a multi-microphone instrument for planetary atmospheres and surfaces

A98  
**EGU2011-9830**
Harri Haukka, Walter Schmidt, Ari-Matti Harri, Jyri Heilimo, Maria Genzer, Ignacio Arruego Rodriguez, Héctor Guerrero Padrón, and Joaquín Azcue Salto
High Level Shock Tests for Mars MetNet Penetrator
ST2.1 – Open session on the magnetosphere (including Julius Bartels Medal Lecture) – Orals
Convener: Steve Milan | Co-Conveners: Natalia Ganushkina
Room: 31
Chairperson: Steve Milan

08:30–08:45 EGU2011-4104
Andrey Samsonov, David Sibeck, Helfried Biernat, Nadezhda Zolotova, Alexandra Alexandrova, Jana Safrankova, Zdenek Nemecek, and Howard Singer
Magnetospheric response to interplanetary shocks: summary of MHD simulations and observations

08:45–09:00 EGU2011-11055
Eija Tanskanen, Tuija Pulkkinen, Kalevi Mursula, and Ari Viljanen
From space weather towards space climate time scales

09:00–09:15 EGU2011-12114
Oleksiy Agapitov, Krasnoselskikh Vladimir, Dudok de Wit Thierry, and Rolland Guy
The Location and Structure of the Chorus Emissions Source During the Perturbed Magnetosphere Conditions

09:15–09:30 EGU2011-4967
Stein Haaland, Finn Søraas, Patrick Daly, Christine Johnsen, Edita Georgescu, Elena Kronberg, Kjellmar Oksavik, and Nikolai Østgaard
Determination of polar cap size and shape using energetic particles.

09:30–09:45 EGU2011-6158
Nikolai Østgaard, Beate Krøvel Humberset, Karl Magnus Laundal, Stein Haaland, Arne Aasnes, James Weygand, and Liisa Juusola
Asymmetries of substorm onset location and the dynamic behavior of auroral substorms during expansion phase

09:45–10:00 EGU2011-568
Zhaojin Rong, Weixing Wan, Chao Shen, Xinlin Li, Malcolm Dunlop, Anatoli Petrukovich, and Elizabeth Lucek
Statistical survey on the magnetic structure in magnetotail current sheets

COFFEE BREAK

Chairperson: Iannis Dandouras

10:30–11:30 EGU2011-4835
Hermann Lühr
Signatures of meteorological phenomena in the ionosphere-thermosphere system (Julius Bartels Medal Lecture)

11:30–11:45 EGU2011-8797
Karlheinz Trattner, Steven Petrinec, and Stephen Fuselier
Evaluating continuous and pulsed reconnection from cusp observations

11:45–12:00 EGU2011-11569
Mark Lester, Stephen Milan, Adrian Grocott, and Rob Fear
Multi SuperDARN Radar Observations of an Interval of Poleward Moving Radar Auroral Forms

ST2.1 – Open session on the magnetosphere (including Julius Bartels Medal Lecture) – Posters
Convener: Steve Milan | Co-Conveners: Natalia Ganushkina
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Mark Lester
The June 8, 2000 ULF wave activity: a case study.

Earthward convected flux ropes/magnetic islands triggering field dipolarization/substorm expansion: Comparison between observations and simulations

The transmission of upstream waves to the magnetosphere: an analysis at widely separated ground stations.

Magnetic Local Time Variation of the Dynamics of the Poleward Auroral Luminosity Boundary and its Scaling

Polar cap convection events and electrojet intensifications in substorms/pseudobreakups

Space Technology 5 Multipoint Observations of a ULF Wave Event

Oblique propagation of ULF waves in the Earth's foreshock region: THEMIS observations

Comparison of Two Successive Magnetospheric Substorms Development

ULF waves simultaneously observed at the bow shock, in the magnetosphere and on the ground

The relationship between the behaviors of the different magnetospheric regions

Distribution profile of magnetic field By component in magnetotail current sheets with guide field

A survey of polar cap densities based on EFW probe measurements

Terrestrial and planetary magnetotails and their response to variable upstream conditions

Comparative Examination of Plasmoid Ejection at Mercury, Earth, Jupiter, and Saturn

The induced magnetotail of Titan

Reconnection in Saturn's magnetotail and its effects on global dynamics

Hot O+ ion presence and directional flows in the magnetosheath of Saturn

Acceleration of Energetic Particles from Global Magnetotail Reconfiguration and Relation to Auroral and Radio Emissions at Earth, Saturn and Jupiter

Programme Group Programme ST
14:45–15:00  EGU2011-1458
Steve Milan and Jennifer Gosling
Superposed epoch analysis of the geosynchronous magnetic field dipolarization associated with substorms
Chairperson: Rumi Nakamura, Suzie Imber

15:30–15:45  EGU2011-12383
Colin Forsyth, Mark Lester, Robert Fear, Elizabeth Lucek, Iannis Dandouras, Andrew Fazakerley, Harold Singer, and Tim Yeoman
Solar wind and substorm excitation of the wavy current sheet

15:45–16:00  EGU2011-1755
Liisa Juusola, Nikolai Østgaard, and Eija Tanskanen
Statistics of plasma sheet convection

16:00–16:15  EGU2011-4620
Aimin Du, Rumi Nakamura, Tielong Zhang, Evgeny Panov, Wolfgang Baumjohann, Hao Luo, Quanming Lu, Martin Volwerk, Vassilis Angelopoulos, and Kelvin Glassmeier
Fast Tailward Flows in the Plasma Sheet Boundary Layer during a Substorm on March 9, 2008: THEMIS Observations

16:15–16:30  EGU2011-4491
Tuula Pulkkinen, Noora Partamies, Minna Palmroth, Jennifer Kissinger, Robert McPherron, Marina Kubysheikina, Karl-Heinz Glassmeier, and Charles Carlson
Plasma sheet magnetic fields and flows during steady convection events

16:30–16:45  EGU2011-7826
Kristian Snekvik, Eija Tanskanen, and Nikolai Østgaard
Flux closure during magnetotail reconnection

16:45–17:00  EGU2011-9353
Martin Connors, Christopher Russell, Vassilis Angelopoulos, and Howard Singer
Magnetic Flux Transfer During the April 5, 2010 Galaxy 15 Event: An Unprecedented Observation

PS5.3/ST6.3 – Planetary, Solar and Heliospheric Radio Emissions (co-organized) – Orals
Convener: Patrick Galopeau | Co-Conveners: Mohammed Y. Boudjada

Room: 32
Chairperson: Patrick H. M. Galopeau

08:30–08:45  EGU2011-4167
Robert Mutel, John Menietti, Donald Gurnett, Jolene Pickett, Laurent Lamy, and Baptiste Cecconi
An Occam’s razor approach to interpreting observed wave modes and polarization in planetary magnetospheres

08:45–09:00  EGU2011-5344
Konrad Sauer and Richard D. Sydora
Fundamental aspects of beam-generated plasma radiation

09:00–09:15  EGU2011-1592
Tatiana Burinskaya, Mikhail Mogilevsky, Tatiana Romantsova, and Jean Louis Rauch
Generation and escape of the Auroral Kilometric Radiation in thin plasma cavities

09:15–09:30  EGU2011-3755
Douglas Menietti, Sheng-Yi Ye, Patricia Schippers, Laurent Lamy, and Donald Gurnett
Narrowband emission observed near a Saturn kilometric radiation source region

09:30–09:45  EGU2011-8657
Anne-Lise Gautier, Baptiste Cecconi, Philippe Zarka, and Georg Fischer
Propagation "over the horizon" of Saturn's radio lightning studied by three-dimensional ray tracing

09:45–10:00  EGU2011-6465
Magnetospheric period oscillations at Saturn: Evidence in magnetic field phase data for rotational modulation of Saturn kilometric radiation emissions

10:00–10:15  EGU2011-8857
Thomas Oswald, Helmut Rucker, Wolfgang Macher, Georg Fischer, Manfred Sampl, and Mykhaylo Panchenko
Numerical calibration of spacecraft antennas in isotropic cold plasma with an application to STEREO/WAVES

PS5.3/ST6.3 – Planetary, Solar and Heliospheric Radio Emissions (co-organized) – Posters
Convener: Patrick Galopeau | Co-Conveners: Mohammed Y. Boudjada
Z31  EGU2011-8874  
**Thomas Oswald**, Manfred Sampl, Helmut Rucker, Wolfgang Macher, Georg Fischer, and Milan Maksimovic  
Preliminary numerical studies of the Solar Orbiter RPW antennas

Z32  EGU2011-9750  
**Baptiste Cecconi**, Jan Bergman, Thomas Chust, and Aurélie Marchaudon  
A step forward in goniopolarimetry with multi-component electric and magnetic radio measurements

Z33  EGU2011-12614  
**Tatiana Romantsova**, Mikhail Mogilevsky, Tatiana Burinskaya, Irina Moiseenko, Dmitry Chugunin, and Jan Hanasz  
Formation of AKR source on the polar edge of auroral region

Z34  EGU2011-7957  
**Mohammed Y. Boudjada**, Patrick Galopeau, Milan Maksimovic, Helmut Rucker, and Wolfgang Voller  
Analysis of the spectral continuity of distinct Type III bursts from high to low frequencies

Z35  EGU2011-8022  
**Mohammed Y. Boudjada**, Patrick Galopeau, and Wolfgang Macher  
Jovian decametric and hectometric events subject to the Io plasma torus effect

Z36  EGU2011-8059  
**Patrick Galopeau** and Mohammed Y. Boudjada  
Beaming cone of Io-controlled Jovian decameter radio emission derived from occurrence probability

Z37  EGU2011-7749  
**Helmut O. Rucker**, Mykhaylo Panchenko, Denis Grodent, and Aikaterini Radioti  
Periodic bursts of non-Io DAM and its relationship to Jovian aurora phenomena

Z38  EGU2011-12330  
**Alain Lecacheux**  
On the SKR and Saturn auroras relationship
Tuesday, 05 April

**ST2.2 – Space plasma processes and dynamics: revelations from multi-point measurements – Orals**

**Convener:** Matthew Taylor | Co-Conveners: Malcolm Dunlop, C.-Philippe Escoubet

**Room:** 32

**Chairperson:** Matt Taylor

13:30–13:45  
**EGU2011-2802**  
*Hiroshi Hasegawa, Bengt Sonnerup, and Takuma Nakamura*  
Reconstruction of magnetopause structures in spacetime from multi-spacecraft measurements

13:45–14:00  
**EGU2011-8458**  
*Karel Jelinek, Zdenek Nemec, and Jana Safrankova*  
Spatial profiles of magnetosheath and LLBL parameters

14:00–14:15  
**EGU2011-2609**  
*Nicole Cornilleau-Wehrlin, Benjamin Grison, Patrick Robert, Patrick Canu, Gérard Belmont, and Laurence Rezeau*  
Statistical study of ULF wave fluctuations at the magnetopause: latitude and local time dependences, as an input for understanding the ULF role in particle penetration from the solar wind into the magnetosphere

14:15–14:30  
**EGU2011-12593**  
*Alessandro Retinò, Andris Vaivads, Yuri Khotyaintsev, Fouad Saharoui, Rumi Nakamura, and Forrest S. Mozer*  
Cluster observations of guide field magnetopause reconnection at sub-ion/electron scales

14:30–14:45  
**EGU2011-1424**  
*Drew Turner, Stefan Eriksson, Tai Phan, Vassilis Angelopoulos, Nick Omidi, James McFadden, and Karl-Heinz Glassmeier*  
Multi-spacecraft observations of a foreshock induced magnetopause disturbance exhibiting distinct plasma flows and an intense density compression

14:45–15:00  
**EGU2011-3928**  
*Jean Berchem, Robert Richard, C. Philippe Escoubet, Matthew G. G. T. Taylor, Harri Lasko, Arnaud Masson, Ianis Dandouras, Henri Reme, Frederic Pitout, and Elizabeth Lucek*  
Using simulations and multipoint observations to unravel reconnection topologies and particle injection sources

**Chairperson:** Malcolm Dunlop

15:30–15:45  
**EGU2011-4866**  
*Jonathan Eastwood, Tai Phan, Michael Shay, Marit Oieroset, Anette Borg, and Vassilis Angelopoulos*  
Multi-spacecraft observations of magnetotail dynamics driven by magnetic reconnection.

15:45–16:00  
**EGU2011-2560**  
*Anette Lauen Borg, Jonathan P. Eastwood, and Matthew G. G. T. Taylor*  
Properties of magnetic flux ropes observed near magnetic reconnection sites in the magnetotail

16:00–16:15  
**EGU2011-4351**  
*Rumi Nakamura and the Sep. 7 2007 event study Team*  
Cluster multi-point observations of flow-braking and dipolarization during Sep.7, 2007 1250 UT event.

16:15–16:30  
**EGU2011-12482**  
*Colin Forsyth, Andrew Fazakerley, Andrew Walsh, Clare Watt, Kristian Garza, Christopher Owen and the Cluster Auroral Team*  
Observations of auroral acceleration at magnetically conjugate spacecraft: A Cluster case study

16:30–16:45  
**EGU2011-3842**  
*Pontus Brandt, Shin Ohtani, Kunihiro Keika, Iannis Dandouras, Mikhail Sitnov, and Edmond Roelof*  
The Dynamics and Energization of the Ring Current During Substorms: A Synoptic 3D View from Cluster and IMAGE/HENA

16:45–17:00  
**EGU2011-11650**  
*Christian Mazelle, Bertrand Lembège, and Audrey Morgenthaler*  
Quasi-perpendicular shocks non stationarity and micro-turbulence

**ST2.2 – Space plasma processes and dynamics: revelations from multi-point measurements – Posters**

**Convener:** Matthew Taylor | Co-Conveners: Malcolm Dunlop, C.-Philippe Escoubet

**Hall Z | Display Time 08:00–19:30**

**Author in Attendance:** 17:30–19:00

**Chairperson:** Malcolm Dunlop/Matt Taylor
A statistical and event study of magnetotail dipolarizations

Changes of the magnetopause locations as a consequence of the IMF BZ component variations.

Relation between interplanetary shocks and IMF rotations and their interaction with the bow shock and magnetopause.

Modification of solar wind parameters upstream of the Earth's bow shock

Two components of power spectral density for magnetosheath turbulence as identified from Cluster four-spacecraft measurements.

Development of compressional turbulence along the Earth's magnetotail.

Extended magnetic reconnection across the dayside magnetopause

Inner plasma structure of the low latitude reconnection layer

Determining the axial direction of high-shear flux transfer events

Extended magnetic reconnection across the dayside magnetopause

Inner plasma structure of the low latitude reconnection layer

The effects of the guide field on the structures of electron density depletions in collisionless magnetic reconnection

A huge deformation of magnetospheric boundaries

Correlation length of the magnetosheath fluctuations and their relation to upstream parameters

A "gas dynamic" magnetopause transition observed by THEMIS

A word of caution on the interpretation of auroral electric field observations

Do high-speed plasma sheet flows contribute to inner magnetosphere dipolarisation? A multi year statistical study using multi-spacecraft observations

Timing of substorm onset from ground-based Pi2 measurements: Comparison of methods
Z102  EGU2011-7106  
Wai Leong Teh and Rumi Nakamura  
Ideal Hall MHD reconstruction of the magnetotail current sheet observed by Cluster

Z103  EGU2011-8513  
Jakub Enzl, Kostiantyn Grygorov, Oleksandr Goncharov, Lubomir Prech, Jana Safrankova, and Zdenek Nemecék  
Tracing of solar wind discontinuities near the Earth orbit at the beginning of Solar Cycle 24

Z104  EGU2011-9973  
Herbert Gunell, Hans Nilsson, Gabriella Stenberg, Maria Hamrin, Tomas Karlsson, Rickard Lundin, and Mats André  
Direct observation of magnetosheath plasma penetrating the magnetopause

Z105  EGU2011-10811  
Stepan Dubyagin, Victor Sergeev, Vassilis Angelopoulos, Andrey Runov, Rumi Nakamura, Wolfgang Baumjohann, Natalia Ganushkina, James Mcfadden, and Davin Larson  
Do flow bursts penetrate into the inner magnetosphere?

Z106  EGU2011-3206  
Jan Soucek and C. Philippe Escoubet  
Non-maxwellian features of magnetosheath ion distribution associated with mirror waves

Z107  EGU2011-3872  
Jesper Gjerloev, Shin Ohtani, Takesi Iijima, James Slavin, and Guan Le  
Spatiotemporal Characteristics of the Field-Aligned Currents

Z108  EGU2011-8092  
Gaetano Zimbardo, Antonella Greco, Luca Sorriso-Valvo, Silvia Perri, Zoltan Voeroes, Giorgi Aburjania, Khatuna Charagazia, and Olga Alexandrova  
Magnetic turbulence in the magnetospheric environment: highlights from multi-spacecraft missions

Programme Group Programme ST 8

ST2.3 – Electromagnetic fields, particle populations and internal structures in the Earth’s inner magnetosphere (including Arne Richter Award for Outstanding Young Scientists Lecture) – Posters
Convener: Sandrine Grimald | Co-Conveners: Ondrej Santolik, Vincent Maget, Farida El-Lemdani Mazouz

Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Farida El-Lemdani Mazouz

Z109  EGU2011-12246  
Oleksiy Agapitov, Vladimir Krasnoselskikh, and Guy Rolland  
Statistical Properties of Whistler Wave Distributions in the Earth Inner Magnetosphere

Z110  EGU2011-926  
Ksenia Orlova, Yuri Shprits, Michael Schulz, and Binbin Ni  
On the bounce-averaging of scattering rates in a realistic field model

Z111  EGU2011-6304  
Frantisek Nemec, Ondrej Santolik, and Michel Parrot  
Line Radiation: types and sources

Z112  EGU2011-13490  
Maria E. Usanova, Konrad Sauer, Ian R. Mann, Richard D. Sydora, and Dietmar Krauss-Varban  
EMIC wave packet generation: Results of nonlinear hybrid particle-in-cell (PIC) simulations

Z113  EGU2011-2356  
Hao Luo, Gengxiong Chen, and Aimin Du  
Simultaneous observations of wave mode inside-outside the plasmasphere and their relationship with low-latitude Pi2 pulsations: THEMIS case study

Z114  EGU2011-6307  
Johan De Keyser and Fabien Darrouzet  
Field-aligned plasma density profiles obtained from CLUSTER observations in the plasmasphere

Z115  EGU2011-8333  
Fabien Darrouzet, Hiroshi Matsui, and Johan De Keyser  
Investigation of plasmaspheric plumes observed by Cluster

Z116  EGU2011-12521  
Guillaume Lointier, Fabien Darrouzet, Pierrette Décréau, Xavier Vallières, Jean-Gabriel Trotignon, and Jean-Louis Rauch  
Statistical Analysis of the Electronic Density Distribution in the Plasmasphere using WHISPER/CLUSTER data

Z117  EGU2011-4445  
Sandrine Grimald, Farida El-Lemdani Mazouz, Claire Foullon, Pierrette Décréau, Scott Boardsen, and Xavier Vallières  
Study of non-thermal continuum patches: wave propagation and plasmapause study
Z118 EGU2011-4441
Sandrine Grimald, Iannis Dandouras, and Elizabeth Lucek
Current density and boundaries localisation in the ring current region

Z119 EGU2011-6547
Harri Laakso, Philippe Escoubet, Arnaud Masson, and Matt Taylor
In-situ observations of electromagnetic fields and waves in the inner magnetosphere

Z120 EGU2011-9707
Karel Kudela, Leonid Lazutin, Irina Myagkova, Mikhail Panasyuk, and Marian Silvka
On the variations of the relativistic electrons in outer radiation belt

Z121 EGU2011-4526
Satoshi Kurita, Yoshizumi Miyoshi, Fuminori Tsuchiya, Yukitoshi Nishimura, Akira Morioka, Vassilis Angelopoulos, James P. McFadden, Uli Auster, John Bonnell, and Hiroaki Misawa
Possible loss mechanism of inner plasma sheet electrons in the morning side: Analysis based on THEMIS statistical survey

Z122 EGU2011-9468
Yuri Shprits, Binbin Ni, Dmitri Subbotin, Kyung-Chan Kim, and Marianne Daae
3D VERB Code Simulations of the Dynamic Evolution of the Outer and Inner Radiation Belts

Z123 EGU2011-11781
Vincent Maget, Solène Lejosne, and Daniel Boscher
Modelling radiation belts outer boundaries

ST2.4/PS5.2 – Terrestrial and planetary magnetotails and their response to variable upstream conditions (co-organized) – Posters

Convener: Eija Tanskanen | Co-Conveners: Suzie Imber, Rumi Nakamura, Caitriona Jackman, Christopher Arridge, Nicolas André
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: n.n.

Z124 EGU2011-7851
Caitriona Jackman and the International Space Science Institute: "Investigating the Dynamics of Planetary Magnetotails" Team
An overview of the aims and plans of an ISSI Team “Investigating the Dynamics of Planetary Magnetotails”

Z125 EGU2011-1145
Caitriona Jackman, James Slavin, and Michele Dougherty
Cassini observations of plasmoids and travelling compression regions in Saturn's magnetotail in 2006.

Z126 EGU2011-4652
Rongsheng Wang, Quanming Lu, Aimin Du, Rumi Nakamura, Wolfgang Baumjohann, and Can Huang
In situ observation of a secondary magnetic island near the center of the ion diffusion region

Z127 EGU2011-6082
Karoly Szego, Zoltan Nemeth, Geza Erdos, Lajos Foldy, Michelle Thomsen, Dot Delapp, and Zsofia Bebesi
The structure of the magnetodisk of Saturn near 20 R_S

Z128 EGU2011-4671
Jian Du, Tielong Zhang, Chi Wang, Wolfgang Baumjohann, and Martin Volwerk
Magnetic configuration in the Venus' induced magnetosphere

Z129 EGU2011-9672
Andrey Fedorov, Stas Barabash, Jean-Andre Sauvaud, and Rickard Lundin
Mars Express measurements of the ion escape rate for solar minimum

Z130 EGU2011-2541
Chaosong Huang
Relation among total magnetotail magnetic flux, solar wind triggers, and substorm onsets during sawtooth events

Z131 EGU2011-2340
Motoharu Nowada, Ching-Huei Lin, Sui-Yan Fu, Zu-Yin Pu, Howard J. Singer, Vassilis Angelopoulos, Charles W. Carlson, and Hans-Ulrich Auster
Magnetic Field and Plasma Responses in the Near-Earth Magnetotail and Magnetospheric Boundary Layer During an Encounter of Heliospheric Current Sheet

Z132 EGU2011-4355
Rumi Nakamura and the Double-onset substorm study Team
Evolution of the near-Earth magnetotail current sheet during a double-onset substorm under a weak solar-wind driver

Z133 EGU2011-12728
Vahe Peroomian and Mostafa El-Alaoui
The Energization of Ions in the Magnetotail during CME- and CIR-driven Geomagnetic Storms
<table>
<thead>
<tr>
<th>Programme Group Programme ST</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Z134</strong> EGU2011-12583</td>
<td>Jan Merka, David Sibeck, and Thomas Narock</td>
</tr>
<tr>
<td>Statistical properties of bursty bulk flows in the magnetosphere revealed by the Virtual Magnetospheric Observatory</td>
<td></td>
</tr>
<tr>
<td>THEMIS multi-case study of BBF braking in the near-Earth plasma sheet</td>
<td></td>
</tr>
<tr>
<td><strong>Z136</strong> EGU2011-13027</td>
<td>Suzanne Imber and James Slavin</td>
</tr>
<tr>
<td>Multiple Flux Ropes in the Earth's Magnetotail</td>
<td></td>
</tr>
<tr>
<td><strong>Z137</strong> EGU2011-5146</td>
<td>Takuma Nakamura, Rumi Nakamura, Alexandra Alexandrova, and Yasubumi Kubota</td>
</tr>
<tr>
<td>Hall magnetohydrodynamic effects for three-dimensional magnetic reconnection with finite width along the direction of the current</td>
<td></td>
</tr>
<tr>
<td><strong>Z138</strong> EGU2011-7361</td>
<td>Alexandra Alexandrova, Vladimir Semenov, Rumi Nakamura, and Helfried Biernat</td>
</tr>
<tr>
<td>Three-dimensional non-steady magnetic reconnection signatures: Model and observations</td>
<td></td>
</tr>
<tr>
<td><strong>Z139</strong> EGU2011-8676</td>
<td>Chris Arridge and Andrew Walsh</td>
</tr>
<tr>
<td>Coupling of Dungey and Vasyliunas cycle reconnection: Drivers and observable consequences</td>
<td></td>
</tr>
<tr>
<td><strong>Z140</strong> EGU2011-8419</td>
<td>Andrew Walsh, Chris Owen, Andrew Fazakerley, Colin Forsyth, and Iannis Dandouras</td>
</tr>
<tr>
<td>Average Pitch Angle Distributions in the Magnetotail: The Effect of Geomagnetic Activity</td>
<td></td>
</tr>
<tr>
<td><strong>Z141</strong> EGU2011-4632</td>
<td>Aimin Du and Tielong Zhang</td>
</tr>
<tr>
<td>Field line resonance trigger auroral arcs identified by ground and multi-spacecraft in the near-Earth magnetotail</td>
<td></td>
</tr>
<tr>
<td><strong>Z142</strong> EGU2011-6722</td>
<td>Elizabeth Davey, Mark Lester, Steven Milan, and Robert Fear</td>
</tr>
<tr>
<td>Substorm and magnetic storm effects on the cross-tail current sheet</td>
<td></td>
</tr>
<tr>
<td><strong>Z143</strong> EGU2011-11098</td>
<td>Eija Tanskanen, James Slavin, Kristian Snekvik, Suzie Imber, Laura Degener, and Lasse Häkkinen</td>
</tr>
<tr>
<td>Magnetotail stress during storms and non-storm intervals</td>
<td></td>
</tr>
</tbody>
</table>
Wednesday, 06 April

**ST1.2 – Multi-Spacecraft Observations and Modelling of Coronal and Heliospheric Processes in the Rising Phase of Cycle 24 – Orals**
Convener: Volker Bothmer | Co-Conveners: Alexis Rouillard, Andrea Opitz
Room: 32
Chairperson: Bothmer, Opitz, Rouillard

10:30–10:45 EGU2011-10403
Robert Bentley, Jean Abourdarham, Andre Csillaghy, Christian Jacquey, Mike Hapgood, Mauro Messerotti, Peter Gallagher, and Karine Bocchialini
Using HELIO to address multi-spacecraft science use cases

10:45–11:00 EGU2011-8570
Shane Maloney and Peter Gallagher
On the acceleration of CMEs during the last solar minimum

11:00–11:15 EGU2011-5466
Manuela Temmer, Christian Möstl, Tanja Rollett, Astrid M. Veronig, and Bojan Vrsnak
Effects of the background solar wind speed on the propagation behavior of CMEs

11:15–11:30 EGU2011-3891
Lan Jian, Christopher Russell, Janet Luhmann, Qiang Hu, Rui Liu, Christian Mostl, Dusan Odstrcil, Peter MacNeice, Hong Xie, Tung-Shin Hsu and the VEX (5, 8) Team
Multi-Spacecraft Observations and Modeling of Interplanetary CMEs and CIRs in 2009 and 2010

11:30–11:45 EGU2011-532
Kamen Kozarev, Kelly Korreck, Maher Dayeh, Arnaud Zaslavsky, and Nathan Schwadron
High-Cadence EUV Imaging, Radio, and In-Situ Observations of Coronal and Interplanetary Shocks: Implications for Energetic Particle Acceleration

11:45–12:00 EGU2011-2367
Vladimir Slemzin, Louise Harra, Alexander Urnov, Sergey Kuzin, Farid Goryaev, David Berghmans, Anik De Groof, and Daniel Seaton
EUV observations of the inner corona and identification of the slow solar wind sources in active regions

**ST1.2 – Multi-Spacecraft Observations and Modelling of Coronal and Heliospheric Processes in the Rising Phase of Cycle 24 – Posters**
Convener: Volker Bothmer | Co-Conveners: Alexis Rouillard, Andrea Opitz
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Bothmer, Opitz, Rouillard

Z121 EGU2011-2043
Interacting CMEs from the Sun to 1 AU: What can we learn from relating heliospheric images to in situ data?

Z122 EGU2011-7912
Tanja Rollett, Christian Möstl, Manuela Temmer, and Astrid Veronig
Propagation Directions and Kinematics of the Coronal Mass Ejections of August 2010

Z123 EGU2011-8144
Alexis Ruffenach, Benoit Lavraud, Matthew J. Owens, Jean-André Sauvaud, Neel Savani, Alexis Rouillard, Andrea Opitz, Janet G. Luhmann, and Christopher T. Russell
Quantitative multi-spacecraft observation of magnetic cloud erosion by magnetic reconnection during propagation.

Z124 EGU2011-8705
Deirdre Wendel, Melvyn Goldstein, Adolfo Figueroa-Vinas, Mark Adrian, and Fouad Sahraoui
Multiple Spacecraft Study of the Impact of Turbulence on Reconnection Rates

Z125 EGU2011-10191
Nina Dreising, Raúl Gómez-Herrero, Andreas Klassen, Bernd Heber, Yulia Kartavykh, and Wolfgang Dröge
Multiple-spacecraft observations of the January 17, 2010 solar energetic particle event

Z126 EGU2011-11269
Antonio Guerrero, Consuelo Cid, Yolanda Cerrato, and Elena Saiz
Geoeffective interactions between structures at the beginning of solar cycle 24

Z127 EGU2011-4993
Bart van der Holst
Counter-propagating Alfven Waves in a 3D Global Solar Wind Model
Temporal evolution and spatial variation of the solar wind in the inner heliosphere from multi-spacecraft observations

Angular spread of solar energetic electrons observed by STEREO, ACE and SOHO

Stochastic acceleration of protons in the Earth's magnetotail current sheet: numerical studies

STEREO/RHESSI studies of CME acceleration and particle acceleration in flares

Particle acceleration by magnetic reconnection: Single X-line vs Multiple X-lines

Particle Acceleration During Solar Flares and Magnetospheric Substorms

Particle Acceleration by Magnetic Reconnection: Single X-line vs Multiple X-lines

Stochastic acceleration of protons in the Earth's magnetotail current sheet: numerical studies

Particle Acceleration during Solar Flares and Magnetospheric Substorms

Mitsuo Oka, Forrest Mozer, Tai Phan, Masaki Fujimoto, Iku Shinohara, and Jonathan Eastwood

Silvia Perri, Antonella Greco, and Gaetano Zimbardo

Manuela Temmer, Astrid M. Veronig, Eduard P. Kontar, S"am Krucker, and Bojan Vrsnak

STEREO/RHESSI studies of CME acceleration and particle acceleration in flares

Constraints on Charged-Particle Acceleration in the Heliosphere

Short timescale variation in the heliospheric ENA flux: IBEX observations and correlations with solar wind observations

Particle Acceleration in reconnection regions

Particle acceleration in coronal arcade

Particle acceleration by magnetic reconnection in coronal arcade

The Flare Temperature Determined By The AIA Imagers On The Solar Dynamics Observatory And RHESSI

The source regions of SEPs observed by SDO in Aug 2010

The 17 January 2005 complex solar radio event associated with interacting fast Coronal Mass Ejections

Particle acceleration in reconnection regions

Particle acceleration by magnetic reconnection in coronal arcade

The Flare Temperature Determined By The AIA Imagers On The Solar Dynamics Observatory And RHESSI

The source regions of SEPs observed by SDO in Aug 2010

The 17 January 2005 complex solar radio event associated with interacting fast Coronal Mass Ejections
Alexis Rouillard, Dusan Odstrcil, Neil Sheeley, Allan Tylka, Angelos Vourlidas, Glenn Mason, Brian Wood, Chee Ng, Adam Szabo, and O. Chris StCyr

White-light observations of a forming wave ahead of a coronal mass ejection

Lynn Bruce Wilson III, Adam Szabo, Andriy Koval, Cynthia A. Cattell, Paul J. Kellogg, Keith Goetz, Aaron Breneman, Kris Kersten, Justin C. Kasper, and Marc Pulupa

Wind Observations of Wave Heating and/or Particle Energization at Supercritical Interplanetary Shocks

Heli Hietala, Neus Agueda, Katerina Andrééová, Rami Vainio, Stuart Nylund, Emilia K. J. Kilpua, and Hannu E. J. Koskinen

Particle acceleration in shock-shock interaction - multi-spacecraft in situ observations

Lynn Bruce Wilson III, Adam Szabo, Andriy Koval, Cynthia A. Cattell, Paul J. Kellogg, Keith Goetz, Aaron Breneman, Kris Kersten, Justin C. Kasper, and Marc Pulupa

Wind Observations of Wave Heating and/or Particle Energization at Supercritical Interplanetary Shocks

Heli Hietala, Neus Agueda, Katerina Andrééová, Rami Vainio, Stuart Nylund, Emilia K. J. Kilpua, and Hannu E. J. Koskinen

Particle acceleration in shock-shock interaction - multi-spacecraft in situ observations

Mark Popecki, Kristin Simunac, Antony Galvin, and Berndt Klecker

He+ Suprathermal Tails as Observed by STEREO/PLASTIC

Harald Kucharek, Eberhard Moebius, Bin Miao, Mats Andre, and Hiroshi Matsui

On the Conspiracy of Ion Reflection and the Local Structure of the Earth's Bow Shock: A multi-scale study.

Steven Petrinec and the IBEX Team

Energetic neutral atom imaging of the magnetospheric cusps and upstream regions

Quanming Lu, Can Huang, Rongsheng Wang, and Shui Wang

The mechanisms of electron acceleration in antiparallel and guide field reconnection

Rongsheng Wang, Rumi Nakamura, Wolfgang Baumjohann, Quanming Lu, Tielong Zhang, Wai-Leong Teh, Martin Volwerk, Aimin Du, Evgeny Panov, and Bertalan Zieger

The observation of electron density cavity during a guide field magnetic reconnection

Masaki Fujimoto, Kentaro Tanaka, and Iku Shinohara

Dynamic magnetic island coalescence and associated electron acceleration

Alessandro Retinò, Rumi Nakamura, Bertalan Zieger, Andris Vaivads, Yuri Khotyaintsev, and Fouad Saharoui

Multi-step electron acceleration in magnetotail reconnection

Andris Vaivads, Alessandro Retinò, Yuri Khotyaintsev, Mats André, and Christopher J. Owen

Suprathermal electron acceleration during reconnection onset in magnetotail

Bertalan Zieger, Alessandro Retino, Rumi Nakamura, Wolfgang Baumjohann, and Anton V. Artemyev

Micro-scale processes of jet braking in the near-Earth magnetotail

Frank Stefani, Marcus Gellert, Gunter Gerbeth, Andre Giesecke, Thomas Gundrum, Guenther Ruediger, and Marcus Seilnayer

Recent and future liquid metal experiments on dynamo action and related magnetohydrodynamic instabilities

Jacques Léorat, Caroline Nore, Jean-Luc Guermond, and Franky Luddens

From precession driven numerical fluid dynamos to planetary dynamos

Francois Daviaud and the VKS Team

Dynamo regimes and transitions in the VKS experiment

Rainer Artl

Solar and stellar applications of the Tayler instability

Mausumi Dikpati

Impact of Changes in the Sun's Conveyor-belt on Recent Solar Cycles
Internal rotation, meridional flow, and the solar dynamo

Helen Popova and Dmitry Sokoloff
Effects of Solar Meridional Circulation on the Solar Dynamo and the Magnetic Cycle

Sandro Donato, Domenico Meduri, and Fabio Lepreti
Magnetic Field Reversal of the Earth: a two-disk Rikitake Dynamo Model

Jean Boisson and Bérengère Dubrulle
Stationary dynamos in the VKS experiment

Krivodubskij Valery
On the apparent mystery of the extended in the time 23rd solar cycle period

Giuseppina Nigro
Study on the Dynamo Transition in a Self-consistent Nonlinear Dynamo Model

Oscillation of Ca H Jet Emission Observed by SOT: Viscous Effects

Modeling of Inner Magnetosphere Coupling Processes

Yuri Zaliznyak, Hugo Breuillard, Oleksiy Agapitov, Vladimir Krasnoselskikh, and Guy Rolland
Reconstruction of Chorus Type Whistler Wave Statistics in the Radiation Belts and Inner Magnetosphere Using Ray Tracing

Observations of EMIC triggered chorus emissions in the magnetosphere

Viviane Pierrard, Fabien Darrouzet, Koen Stegen, Natalya Ganushkina, and Mirela Voiculescu
The dynamics of the plasmasphere

Origin of Trapped Radiation in the Near Earth Environment (Arne Richter Award for Outstanding Young Scientists Lecture)

Jean Andre Sauvaud, Dominique Delcourt, Martin Walt, and Umran Inan
A systematic magnetic storm effect on the electron energy spectra of the Earth's radiation belt at L< 3.5
Thursday, 07 April

**CL2.12 – Solar and Geomagnetic Activity and Their Influences on the Earth’s Weather and Climate (co-listed) – Orals**
Convener: Jean Lilensten | Co-Conveners: Sergei Avakyan, Thierry Dudok de Wit
Room: 16
Chairperson: Jean Lilensten

13:30–13:45 EGU2011-5033
**Colin Price**
The Global Atmospheric Electric Circuit

13:45–14:00 EGU2011-14115
**Jean-François Hochedez**
Solar irradiance

14:00–14:15 EGU2011-12902
**Joachim Curtius** and the CLOUD Team
Investigating the link between cosmic rays and Earth's climate: the CLOUD experiment at CERN

14:15–14:30 EGU2011-8298
**Alexander Shapiro**, Werner Schmutz, Eugene Rozanov, Micha Schoell, Margit Haberreiter, Anna Shapiro, and Stephan Nyeki
A new approach to long-term reconstruction of the solar spectral irradiance suggests large historical solar forcing

14:30–14:45 EGU2011-10813
**Luis Eduardo Vieira**, Thierry Dudok de Wit, Matthieu Kretzschmar, and Gaël Cessateur
SOTERIA Project: Real-time reconstructions of the solar total and spectral irradiance for space weather applications

14:45–15:00 EGU2011-4438
**Claus Fröhlich**
Total solar irradiance during the last three solar cycles: Consequences for the reconstruction back to 1900.

**CL2.12 – Solar and Geomagnetic Activity and Their Influences on the Earth’s Weather and Climate (co-listed) – Posters**
Convener: Jean Lilensten | Co-Conveners: Sergei Avakyan, Thierry Dudok de Wit
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Jean Lilensten

**XL88** EGU2011-677
**Renata Lukianova** and Genrikh Alexseev
High solar irradiance episode in 2001/2002 and relevant Earth's climate anomalies

**XL89** EGU2011-1467
**Peter Stauning**
Solar activity - climate relations: A different approach.

**XL90** EGU2011-1479
**Laure Lefevre**, Frederic Clette, and Laurence Wauters
Towards advanced sunspot-based indices and solar forcing proxies

**XL91** EGU2011-1608
**Mykhaylo Lyashenko**, Viktor Burmaka, Leonid Chernogor, Igor Domnin, Leonid Emelyanov, and Dmitry Kotov
Experimental Investigations of the Ionospheric Processes during Solar Activity Minimum Period

**XL92** EGU2011-2877
**Libor Hejklik**
Lunar signal in cloudiness is stronger than in precipitation

**XL93** EGU2011-4450
**Claus Fröhlich**
Spectral Solar Irradiance over Solar Cycle 23 from Sunphotometers of VIRGO on SOHO.

**XL94** EGU2011-4648
**Robert Cahalan**, Guoyong Wen, Peter Pilewskie, and Jerald Harder
Atmospheric Temperature Responses to Solar Spectral Irradiance Variations

**XL95** EGU2011-6436
**Venera Dobrica**, Crisan Demetrescu, and Georgeta Maris
On the response of the European climate to solar/geomagnetic long-term activity
Assessing uncertainty of solar signals in the tropospheric temperature field

Are different Total Solar Irradiance records and reconstructions consistent with each other? A statistical view.

The contribution of different factors to the evolution of the middle atmosphere state from 2004 to 2009

The response of the MLS mesospheric daytime hydroxyl to the short-term solar irradiance variability

Giant magnetospheres - small moons: Who's in the driver's seat?

Global configuration and dynamics of Ganymede's magnetosphere: Three-dimensional MHD simulations

Moon-magnetosphere interaction signatures as tools for studying the magnetospheres of outer planets

Energetic electron precipitation at Titan

Identification of Ganymede's magnetospheric regions and associated plasma processes from Galileo multiple flyby observations

Do enhancements in Io's volcanic activity weaken Jupiter's magnetospheric activity?

Plasma IMS Composition Measurements for Europa, Ganymede and the Jovian System

Energetic particles in the vicinity of Rhea compared to Enceladus and Dione: Cassini MIMI/LEMMS results

Ion circulation and precipitation at Ganymede
### ST1.1 – Open session on the Sun and heliosphere (including Hannes Alfvén Medal Lecture) – Orals
Convener: Olga Malandraki | Co-Conveners: Volker Bothmer, Bernd Heber

**Room: 31**

**Chairperson: Olga Malandraki Bernd Heber**

<table>
<thead>
<tr>
<th>Time</th>
<th>Paper ID</th>
<th>Authors</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30–08:45</td>
<td>EGU2011-13136</td>
<td>Liyun Zhang, Kalevi Mursula, Ilya Usoskin, and Huaning Wang</td>
<td>Global analysis of active longitudes of sunspots and solar flares</td>
</tr>
<tr>
<td>08:45–09:00</td>
<td>EGU2011-6113</td>
<td>Jose Angel Abreu, Friedhelm Steinhilber, Jürg Beer, Ken McCracken, and Antonio Ferriz-Mas</td>
<td>Properties of solar activity derived from cosmogenic radionuclides</td>
</tr>
<tr>
<td>09:00–09:15</td>
<td>EGU2011-6180</td>
<td>Eckart Marsch, Sofiane Bourouaine, and Fritz Neubauer</td>
<td>Evidence of ion-cyclotron resonance heating of solar wind alpha particles</td>
</tr>
<tr>
<td>09:30–09:45</td>
<td>EGU2011-8831</td>
<td>Daniel Reisenfeld and the Genesis Team</td>
<td>Solar Wind Elemental and Isotopic Abundance Results from the Genesis Mission</td>
</tr>
<tr>
<td>09:45–10:00</td>
<td>EGU2011-3183</td>
<td>Mark Siewert and Hans-Jürg Fahr</td>
<td>The inner heliospheric source for keV energetic neutral atoms</td>
</tr>
</tbody>
</table>

---

**COFFEE BREAK**

**Chairperson: Iannis Dandouras Olga Malandraki**

<table>
<thead>
<tr>
<th>Time</th>
<th>Paper ID</th>
<th>Authors</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30–11:30</td>
<td>EGU2011-4860</td>
<td>Syun-Ichi Akasofu</td>
<td>The Choice of the Concept of Magnetic Field Lines or of Electric Current Lines (Hannes Alfvén Medal Lecture)</td>
</tr>
<tr>
<td>11:30–12:00</td>
<td>EGU2011-3902</td>
<td>David McComas</td>
<td>IBEX Observations of the Outer Heliosphere</td>
</tr>
</tbody>
</table>

---

**LUNCH BREAK**

**Chairperson: Bernd Heber Volker Bothmer**

<table>
<thead>
<tr>
<th>Time</th>
<th>Paper ID</th>
<th>Authors</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00–14:15</td>
<td>EGU2011-3825</td>
<td>Janet Luhmann, Yan Li, Ying Liu, Dusan Odstrcil, Peter MacNeice, Xuepu Zhao, Eileen Chollet, Lan Jian, and Matthew Owens</td>
<td>Tests of a model framework for interpreting heliospheric particle events</td>
</tr>
<tr>
<td>14:15–14:30</td>
<td>EGU2011-2190</td>
<td>Katerina Andreeova, Emilia Kilpua, Liisa Juusola, Alexey Isavnin, Rami Vainio, and Hannu Koskinen</td>
<td>Depleted magnetic bottle in 90 degrees pitch angle within magnetic cloud</td>
</tr>
</tbody>
</table>
14:30–14:45  EGU2011-5325  
Katsuhide Marubashi, Yeon-Han Kim, Kyung-Suk Cho, Yong-Deuk Park, Kyu-Cheol Choi, Seonghwan Choi, and Ji-Hye Baek
Occurrence Frequency of Interplanetary Magnetic Flux Ropes

14:45–15:00  EGU2011-479  
Vidya charan dwivedi
Multi-instrumental study of major geomagnetic event recorded on 15 December 2006 during unusual declining phase of solar cycle 23: complex interplanetary source event

ST1.1 – Open session on the Sun and heliosphere (including Hannes Alfvén Medal Lecture) – Posters
Convener: Olga Malandraki | Co-Conveners: Volker Bothmer, Bernd Heber
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Volker Bothmer Olga Malandraki

Z125  EGU2011-1577  
Cesar Martin, Shrinivasrao R. Kulkarni, Jan Grunau, Robert F. Schweingruber, Stephan Böttcher, Eckart Böhm, Sönke Burmeister, Bernd Heber, Dennis Sie and the SolO Kiel Team
Initial Performance Results of the High Energy Telescope (EPD/HET) on Solar Orbiter

Z126  EGU2011-3527  
Nicky Chorley, Claire Foullon, Bogdan Hnat, Valery Nakariakov, and Kyoyo Shibasaki
Long period oscillations in sunspots: period persistence and phase response to eruptive activity

Z127  EGU2011-3698  
Olga Gutynska, Jana Safrankova, Zdenek Nemecek, and John D. Richardson
MHD properties of plasma fluctuations in different sheaths

Z128  EGU2011-3705  
Andrii Lynnyk, Jana Safrankova, Zdenek Nemecek, and Marek Vandas
Study of the oblate shape of the MCs observed by WIND

Z129  EGU2011-3771  
Bernd Heber, Stephan Böttcher, Sönke Burmeister, Cesar Martin, Reinhold Müller-Mellin, Rolf Paspirgilis, Björn Schuster, Lars Seimetz, Dennis Sie, Robert Wimmer-Schweingruber and the SOLO-EPT Team
The Electron Proton Telescope for Solar Orbiter

Z130  EGU2011-4563  
Vsevolod Lozitsky and Mykola Gordovskyy
Observations of small-scale magnetic fields in solar flares

Z131  EGU2011-4707  
Elena Vernova, Marta Tyasto, and Dmitry Baranov
Solar activity as manifestation of magnetic field development

Z132  EGU2011-6089  
Energetic Particle Observations and Propagation in the 3-D Heliosphere: December 2006 events

Z133  EGU2011-7715  
Christoph Terasa, Victor de Manuel, Sebastian Boden, Stephan Böttcher, Bernd Heber, Shrinasrao Kulkarni, César Martín, Robert Wimmer-Schweingruber, Robert P. Lin, Dong-Hun Lee and the Solar Orbiter STEIN Team
The SupraThermal Electrons, Ions and Neutrals detector for Solar Orbiter

Z134  EGU2011-10934  
Stepan Stverak, Pavel M. Travnicek, and Petr Hellinger
Evolution of the electron heat flux in the expanding solar wind: Helios observations

Z135  EGU2011-11215  
Geza Erdos and Andre Balogh
Magnetic flux density measured in fast and slow solar wind streams

Z136  EGU2011-11581  
Andreas Klassen, Raúl Gómez-Herrero, and Bernd Heber
Electron spikes, type III radio bursts and EUVI jets on February 22, 2010

Z137  EGU2011-11926  
Konstantinos Dialynas, Stamatios M. Krimigis, Donald G. Mitchell, Edmond C. Roelof, and Robert B. Decker
On the geometrical characteristics and energy variations of the heliospheric "Belt" as revealed by Cassini/INCA measurements

Z138  EGU2011-13864  
Olga Malandraki, Allan J. Tyika, Chee K. Ng, Richard G. Marsden, Cecil Tranquille, and Athanasios Geranios
SPECTRAL AND COMPOSITIONAL INVARIANCE IN THE 3-D HELIOSPHERE: ULYSSES, WIND & ACE OBSERVATIONS


ST3.1 – Open session on the ionosphere and thermosphere – Orals

Convener: Jan Laštovicka | Co-Conveners: Bruno Zolesi, Anasuya Aruliah

Room: 25

Chairperson: Jan Lastovicka

08:30–08:45 EGU2011-2778

Konstantinos S. Kalogerakis and Michael A. Giaros
Lessons from a Lifetime: O(1D) Emission in Ionospheric Modification

08:45–09:15 EGU2011-12067

Stan Stankov, Gilles Wautelet, Sandrine Lejeune, Justine Spits, and Rene Wannat
On the impact of ionospheric variability and disturbances on GNSS-based positioning applications

09:15–09:30 EGU2011-1008

Libo Liu
The unusual ionosphere under prolonged solar minimum

09:30–09:45 EGU2011-8236

Yenca O. Migoya Orue, Bruno Nava, and Sandro M. Radicella
Assessment of NeQuick and IRI models using TEC from satellite altimeters

09:45–10:00 EGU2011-10850

Alexey Oinats, Konstantin Kutelev, Vladimir Kuran, and Nizomu Nishitani
Joint observation of large-scale travelling ionospheric disturbances using SuperDARN Hokkaido radar and Eastern Siberia chirp sounders network

10:00–10:15 EGU2011-3237

Farida El-Lemdani Mazouz, Hervé De Feraudy, Jean-Louis Pinçon, and Michel Parrot
V shaped streaks recorded on board DEMETER above powerful thunderstorms: a statistical study

ST3.1 – Open session on the ionosphere and thermosphere – Posters

Convener: Jan Laštovicka | Co-Conveners: Bruno Zolesi, Anasuya Aruliah

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Bruno Zolesi

Z143 EGU2011-2255

Jan Lastovicka, Josef Boska, Dalia Buresova, and Dan Kouba
Project SX5 - development of a new tool for ionospheric investigations and Czech participation in

Z144 EGU2011-5879

Jan Lastovicka, Josef Boska, Dalia Buresova, and Dan Kouba
Very high foEs - reality or oblique reflections?

Z145 EGU2011-122

Newton Silva de Lima, Alan dos Santos Ferreira, Rutenio Castro de Araujo, and Kedma Cristine Yamamoto
Observations of MSTIDs/GWs at the F2 layer heights in the near equatorial region.

Z146 EGU2011-7943

Elijah O. Oyeyemi, Sandro M. Radicella, Bruno Nava, Lee-Anne McKinnell, and Yenca O. Migoya Orue
On the empirical model of F2 peak electron density for the European Region

Z147 EGU2011-4453

Claudia Candido, Inez Batista, Fabio Becker-Guedes, Mangalathayil Abdu, José Humberto Sobral, and Hissao Takahashi
Statistical analysis of spread-F occurrence and ionospheric variability over Brazil during solar minimum activity

Z148 EGU2011-12739

Elena Andreeva, Svetlana Kalashnikova, Viacheslav Kunitsyn, and Evgeny Tereshchenko
Use of GIMs in high and midlatitudes
EGU General Assembly 2011

Sounding of the modified by powerful HF radio waves ionosphere by navigational satellites radio transmissions.

Artem M. Padokhin, Vyacheslav E. Kunitsyn, Elena S. Andreeva, Marina O. Nazarenko, Vladimir L. Frolov, and Georgy P. Komrakov

Deducing spatial properties of auroral primary particle distributions from ground-based optical imaging.

Katarina Axelsson, Tima Sergienko, Ingrid Sandahl, and Urban Brändström

Properties of harmonic electron cyclotron waves in the low-density auroral ionosphere

Gordon James

Study of an auroral breakup during quiet solar wind conditions

Ragnhild Schroder Hansen, Yngvida Linnéa Andalsvik, Anja Lyng Bækken, Jone Reistad, Christine Gabrielle, Owen Roberts, Njál Gulbransen, and Hiroatsu Sato

Automatic detection and characterization of plasma bubbles and other low latitude ionospheric disturbances in DEMETER data

Tatsuo Onishi, Jean-Jacques Berthelier, and Michel Malingre

Plasma convection jets near the poleward boundary of the nightside auroral oval and their relation to Pedersen conductivity gradients

Hui Wang, Hermann Luehr, and Aaron Ridley

On the assessment of space weather models for operational use: evaluation of the performance of ionospheric forecasting models

Ioanna Tsagouri

Ionospheric scintillation activity measured in the African region by means of GNSS signals

Andreja Susnik and Biagio Forte

GPS phase scintillation at high latitudes following near-earth interplanetary coronal mass ejections

Paul Prikryl, Ian G. Richardson, Periyadan T. Jayachandran, and Sajjan C. Mushini

Optimal Solar Inputs for use in Upper Atmosphere Density Models

Sean Bruinsma and Thierry Dudok de Wit

Cosmophysical and natural factors, and trauma occurrence level of people working and living behind the polar circle.

Tatiana Novikova, Oleg Shumilov, Elena Kasatkina, and Alexey Chramov

Space Weather Precursor Services under ESA’s SSA programme

Gareth Lawrence, Simon Reid, Eva Robbrecht, Michel Kruglanski, Rowena Smillie, Norbert Jakowski, Daniel Heynderickx, Pablo Beltrami, and Truls-Lynne Hansen

ST5.1/NH8.6 – Space Weather and its Effects on Terrestrial and Geo-Space Environments: Science and Applications (co-organized) – Orals
Convener: Norma Crosby | Co-Conveners: Mirela Voiculescu, Aleksey Dmitriev
Room: 32
Chairperson: Norma Crosby

15:30–15:45 EGU2011-13709

Ioanna Tsagouri

On the assessment of space weather models for operational use: evaluation of the performance of ionospheric forecasting models

15:45–16:00 EGU2011-2662

Maria Elena Innocenti, Giovanni Lapenta, Lapo Bettarini, Ed Lee, Stefano Markidis, Bojan Vrsnak, Manuela Temmer, Astrid Veronig, Francois Crespon, Chafih Skandrani and the Soteria Space-Weather Forecast & Data Assimilation Team

Solar wind forecasting: a method based on data assimilation with Kalman filters

16:00–16:15 EGU2011-11171

Andreja Susnik and Biagio Forte

Ionospheric scintillation activity measured in the African region by means of GNSS signals

16:15–16:30 EGU2011-7928

Paul Prikryl, Ian G. Richardson, Periyadan T. Jayachandran, and Sajjan C. Mushini

GPS phase scintillation at high latitudes following near-earth interplanetary coronal mass ejections

16:30–16:45 EGU2011-5888

Sean Bruinsma and Thierry Dudok de Wit

Optimal Solar Inputs for use in Upper Atmosphere Density Models

16:45–17:00 EGU2011-232

Tatiana Novikova, Oleg Shumilov, Elena Kasatkina, and Alexey Chramov

Cosmophysical and natural factors, and trauma occurrence level of people working and living behind the polar circle.

17:00–17:15 EGU2011-6476

Gareth Lawrence, Simon Reid, Eva Robbrecht, Michel Kruglanski, Rowena Smillie, Norbert Jakowski, Daniel Heynderickx, Pablo Beltrami, and Truls-Lynne Hansen

Space Weather Precursor Services under ESA’s SSA programme

ST5.1/NH8.6 – Space Weather and its Effects on Terrestrial and Geo-Space Environments: Science and Applications (co-organized) – Posters
Convener: Norma Crosby | Co-Conveners: Mirela Voiculescu, Aleksey Dmitriev
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Norma Crosby
Z155  EGU2011-8403
Gerald Duma, Friedemann Freund, Max Lazarus, and Taha Rabeh
Coupled ionospheric and telluric electromagnetic fields - seismotectonic relevance

Z156  EGU2011-1629
Oleg Shumilov, Elena Kasatkina, Vladimir Masloboev, Alexandr Kanatjev, Mauri Timonen, Kari Mielikainen, Natalia Lukina, and Irina Kirtsideli
Solar and volcanic signals in tree-rings from Kola Peninsula and Northern Lapland

Z157  EGU2011-1630
Elena Kasatkina, Oleg Shumilov, Marja-Liisa Sutinen, Alexey Chramov, Alexey Enykeev, and Tatiana Novikova
Search for solar and lunar rhythms in suicides in European Arctic (Northwest of Russia and Finnish Lapland)

Z158  EGU2011-10841
Tamara Breus, Yuriy Gurfinke, Vadim Ozheredov, and Tatyana Zhenchenko
The threshold effects of Space and Terrestrial weather influence on human physiological parameters

Z159  EGU2011-4626
Tamara Breus, Vadim Ozheredov, and Vladimir Obridko
Analysis of the solar activity dynamics by the method of nonlinear singular forecasting

Z160  EGU2011-13402
Peter Stauning
Seasonal variations in the monitoring by PCN and PCS indices of Solar Wind energy input to the Magnetosphere.

Z161  EGU2011-10581
Consuelo Cid, Yolanda Cerrato, Walter D. Gonzalez, and Elena Saiz
A new solar wind-magnetosphere coupling function

Z162  EGU2011-5073
Edwin Catalan, Lorena Gayarre, Oscar García, Juan Jose Blanco, Jose Medina, Sebastian Sanchez, Manuel Prieto, and Daniel Meziat
Castilla-La Mancha Neutron Monitor (CaLMa) GEANT4 simulations

Z163  EGU2011-5085
Edwin Catalan, Juan Jose Blanco, Jose Medina, Oscar García, Javier Rodriguez-Pacheco, and Miguel Angel Hidalgo
Castilla-La Mancha Neutron Monitor (CaLMa) expected response to solar events using the neutron monitor data base (NMDB)

Z164  EGU2011-5101
Jose Medina, Juan Jose Blanco, Oscar García, Edwin Catalan, Daniel García, Daniel Meziat, Javier Rodriguez-Pacheco, Sebastian Sanchez, Manuel Prieto, and Miguel Angel Hidalgo
Castilla-La Mancha neutron monitor (CaLMa) status at April 2011

Z165  EGU2011-5184
Kazi Abul Firoz, Yong-Jae Moon, Kyung-Suk Cho, Jung-A Hwang, Yong-Deuk Park, Karel Kudela, and Lev Dorman
Relationship between GLE and Solar X-ray Flare

Z166  EGU2011-10824
Richard Boynton, Michael Balthkin, Stephen Billings, and Ping Li
Dynamical model for the evolution of Dst

Z167  EGU2011-11701
Costel Munteanu, Stein Haaland, and Bagrat Mailyan
Improved estimation of propagation times of short-term IMF variations using minimum variance analysis and wavelet de-noising techniques

Z168  EGU2011-9727
Aleksey Dmitriev, Alla Suvorova, and Igor Veselovsky
Magnetosphere Expansion On Recovery Phase Of Recurrent Magnetic Storms

Z169  EGU2011-3717
Daniel Weimer and C. Robert Clauer
A new Model for Predicting Geomagnetic Perturbations

Z170  EGU2011-12876
Kalevi Mursula, Eija Tanskanen, and Jeffrey Love
Spring-Fall asymmetry of substorm strength, geomagnetic activity and solar wind: Implications for semiannual variation and solar hemispheric asymmetry

Z171  EGU2011-9799
Diana Besliu-Ionescu, Oana Chiricuta, Marilena Mierla, and Georgeta Maris
Study of Halloween 2003 events

Z172  EGU2011-9691
Oana Chiricuta, Diana Besliu-Ionescu, Marilena Mierla, and Georgeta Maris
Analysis of coronal mass ejections who produced major geomagnetic storms during the period 1998-2008
EGU General Assembly 2011

PS5.0/ST6.1 – Planetary Plasma Physics, including electrodynamics of induced magnetospheres (co-organized) –

Posters

Convener: Esa Kallio | Co-Conveners: Philippe Garnier, Hermann Opgenoorth, Mark Lester

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

Z45  EGU2011-1065
Magda Delva, Riku Jarvinen, Esa Kallio, César Bertucci, and Christian Mazelle
On symmetry of the Venus neutral hydrogen exosphere and PCW occurrence

Z46  EGU2011-7659
Riku Jarvinen, Esa Kallio, Andrei Fedorov, Tielong Zhang, Stas Barabash, Sergey Dyadechkin, Pekka Janhunen, and Ilkka Sillanpää
Energization and dawn-dusk asymmetries of the escaping pickup ions at unmagnetized planets

Z47  EGU2011-214
Aleksey Kiriev and Alexander Krymskii
Distribution of currents and convection in the ionospheres of Venus and Mars.

Z48  EGU2011-3834
Tess Mcenulty, Janet Luhmann, Impe Depater, Tielong Zhang, Christopher Russell, Lan Jian, Yingjuan Ma, Niklas Edberg, Edik Dubinin, and Stas Barabash
VEX Observations of Heliospheric Structures Influencing Planetary Ion Escape

Z49  EGU2011-3979
Kei Masunaga, Yoshifumi Futana, Masatoshi Yamauchi, Stas Barabash, Tielong Zhang, Naoki Terada, and Shoichi Okano
Ion outflow channels around Venus controlled by IMF directions

Z50  EGU2011-9525
Hanying Wei, Christopher T. Russell, Jillian T. M. Daniels, Tielong Zhang, Robert J. Strangeway, and Janet G. Luhmann
Electromagnetic Waves observed near the ionopause of Venus

Z51  EGU2011-10658
Michael Zellinger, Ute Möstl, Nikolai Erkaev, and Helfried Biernat
The Influence of Gravity on the Evolution of the Kelvin-Helmholtz Instability around Venus

Z52  EGU2011-3494
Valeriy Tenishev, Kenneth Hansen, Michael Combi, Martin Rubin, and Tamas Gombosi
Modeling the neutral exosphere and the energy distribution of pick-up ions of lunar origin

Z53  EGU2011-7198
Graziella Branduardi-Raymont and the AXIOM Collaboration Team
AXIOM: Advanced X-ray Imaging Of the Magnetosphere

Z54  EGU2011-4393
Susan McKenna-Lawlor, Esa Kallio, and Riku Jarvinen
Magnetic shadowing of high energy ions at Mars: SLED/Phobos-2 observations and hybrid model simulations

Z55  EGU2011-4397
Esa Kallio and Stas Barabash
Magnetized Mars: Spatial distribution of oxygen ions

Z56  EGU2011-7784
Sergey Dyadechkin, Esa Kallio, Riku Jarvinen, and Pekka Janhunen
Curvilinear coordinate introduction in the HYB hybrid model

Z57  EGU2011-262
Catherine Dieval, Stas Barabash, Hans Nilsson, Gabriella Stenberg, Yoshifumi Futana, Mats Holmström, Andrei Fedorov, and Rudy Frahm
A statistical study of proton precipitation at Mars

Z58  EGU2011-4303
Yasubumi Kubota, Kiyoshi Maezawa, and Hidekatsu Jin
The tail formation and ion escape processes for the Martian ionosphere: The comparison between no IMF case and finite IMF cases
<table>
<thead>
<tr>
<th>Z59</th>
<th>EGU2011-5915</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ronan Modolo</strong>, Marco Mancini, Francois Leblanc, Gerard Chanteur, Manabu Yagi, and Jean-Yves Chaufray</td>
<td></td>
</tr>
<tr>
<td>Modeling of the solar wind interaction with Mars: first results of high spatial resolution hybrid simulations.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Z60</th>
<th>EGU2011-10085</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emilie Richer</strong>, Gérard M. Chanteur, Ronan Modolo, and Eduard Dubinin</td>
<td></td>
</tr>
<tr>
<td>Properties of reflected Solar Wind protons on the Martian Bow Shock: investigations by means of 3-dimensional simulations</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Z61</th>
<th>EGU2011-5494</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chia-Yu Tzou</strong>, Norbert Krupp, and Wing-Huen Ip</td>
<td></td>
</tr>
<tr>
<td>Energetic Particle Injection Events in the Saturnian Magnetosphere</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Z62</th>
<th>EGU2011-10818</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Philippe Garnier</strong>, Jan-Erik Wahlund, Madeleine Holmberg, Michiko Morooka, Donald Gurnett, and William Kurth</td>
<td></td>
</tr>
<tr>
<td>Impact of energetic electrons on the Cassini RPWS Langmuir probe at Saturn</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Z63</th>
<th>EGU2011-7609</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zoltan Nemeth</strong>, Karoly Szego, Geza Erdos, Lajos Foldy, and Zsofia Bebesi</td>
<td></td>
</tr>
<tr>
<td>The formation of plasma structures in the magnetodisk of Saturn</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Z64</th>
<th>EGU2011-9086</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katherine Ramer, <strong>Margaret Kivelson</strong>, and Nick Sergis</td>
<td></td>
</tr>
<tr>
<td>Force Balance in Saturn's Ring Current</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Z65</th>
<th>EGU2011-2745</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ilkka Sillanpää</strong>, Robert Johnson, Esa Kallio, and Riku Jarvinen</td>
<td></td>
</tr>
<tr>
<td>New ion Impact Simulations for Titan</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Z66</th>
<th>EGU2011-1356</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Niklas Edberg</strong>, Karin Ågren, Jan-Erik Wahlund, Michiko Morooka, David Andrews, Stan Cowley, Anne Wellbrock, Andrew Coates, Cesar Bertucci, and Michele Dougherty</td>
<td></td>
</tr>
<tr>
<td>Observations of a structured ionospheric outflow plume at Titan</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Z67</th>
<th>EGU2011-4744</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sergey Zhdanov</strong> and Gregor Morfill</td>
<td></td>
</tr>
<tr>
<td>Diagnostics of naturally excited waves in a dynamically active complex (dusty) plasma</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Z68</th>
<th>EGU2011-6612</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christiane Helling, <strong>Aline A. Vidotto</strong>, and Moria Jardine</td>
<td></td>
</tr>
<tr>
<td>Bow-shocks in transit observations of extrasolar planets</td>
<td></td>
</tr>
</tbody>
</table>
Friday, 08 April

**NP6.1 – Mixing, Diffusion and Lagrangian transport in Geophysical Flows. (co-listed) – Orals**

**Convener:** Pilar López González-Nieto | **Co-Conveners:** Jose M. Redondo, Joe LaCasce, Kristofer Döös, Maria Josefina Olascoaga, Gyorgy Karolyi, Arthur Mariano

**Room:** 13

**Chairperson:** Jose M. Redondo

08:30–08:45 EGU2011-212

Claudia Cherubini

Modeling approaches for fluid flow and pollutant propagation in a fractured and karst limestone

08:45–09:00 EGU2011-5562

Birgit Futterer, Florian Zaussinger, Christoph Egbers, and Nicoleta Scurtu

Variation of viscosity contrast for convection experiments in spherical shells as part of geophysical flow simulation experiment ‘GeoFlow II’

09:00–09:15 EGU2011-1376

Andrew Jackson, Barbara Turnbull, and Richard Munro

Scaling Laws for Lobe and Cleft Patterns at the Front of Particle-Laden Gravity Currents

09:15–09:30 EGU2011-7774

Maristella Berta, Annalisa Griffa, Angelique C. Haza, and Laura Ursella

Surface transport in coastal and open-sea areas of the Adriatic Sea from Finite-Scale Lyapunov Exponents

09:30–09:45 EGU2011-3778

Francesco Nencioli, Francesco d’Ovidio, Andrea M. Doglioli, and Anne A. Petrenko

Real-time in-situ tracking of Lagrangian coherent structures in a coastal region

09:45–10:00 EGU2011-7984

Sandy Koch, Uwe Harlander, Rainer Hollerbach, and Christoph Egbers

Laboratory experiment of inertial wave-interactions in a rotating spherical shell

**NP6.1 – Mixing, Diffusion and Lagrangian transport in Geophysical Flows. (co-listed) – Posters**

**Convener:** Pilar López González-Nieto | **Co-Conveners:** Jose M. Redondo, Joe LaCasce, Kristofer Döös, Maria Josefina Olascoaga, Gyorgy Karolyi, Arthur Mariano

**Halls X/Y | Display Time 08:00–17:00**

**Author in Attendance: 13:30–15:00**

**Chairperson:** Ana Tarquis

XY369 EGU2011-755

Samuel Marshall and Peter Read

An Investigation into Variable Topography in a Baroclinic Annulus

XY370 EGU2011-13341

Ana Maria Tarquis, Pilar López-Gonzalez-Nieto, and Jose Manuel Redondo

Time Evolution of the Fractal Dimension in Turbulent Plumes

XY371 EGU2011-751

Aliya Tairova, Georgiy Belyakov, Nicolay Baryshnikov, and Sergey Turuntaev

Filtration and sedimentation in the channel with permeable walls

XY372 EGU2011-1708

Chih-Yu Kuo, Li-Tsung Sheng, Shang-Yu Chiu, Yih-Chin Tai, and Shu-San Hsiau

The streamwise solid volume fraction of parallel accelerating dry granular flows and the evolution of the fraction across normal granular shocks

XY373 EGU2011-2135

Valentina Lombardi, Claudia Adduce, Giampiero Sciortino, and Michele La Rocca

Gravity currents moving on smooth and rough beds

XY374 EGU2011-2590

Florian Zaussinger

Semiconvection

XY375 EGU2011-11727

Sebastian Borchert, Felix Rieper, Ulrich Achatz, and Mark Fruman

A finite-volume model of the differentially heated rotating annulus with implicit sub-gridscale turbulence parameterization

XY376 EGU2011-7011

Helena I. S. Nogueira, Claudia Adduce, Elsa Alves, and Mário J. Franca

Analysis of the entrainment on lock-exchange density currents
<table>
<thead>
<tr>
<th>XY377</th>
<th>EGU2011-8214</th>
<th>Andrew Thompson and Jean-Baptiste Sallee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Cross-Front Transport Near Topographically-Induced Jet Transitions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>XY378</th>
<th>EGU2011-1885</th>
<th>Colin Cotter and Greg Pavliotis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Eddy parameterisations from data-driven coarse-graining of Lagrangian trajectories</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>XY379</th>
<th>EGU2011-6897</th>
<th>Tarmo Soomere, Oleg Andrejev, Kai Myrberg, and Alexander Sokolov</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Quantification of the potential of offshore areas in terms of Lagrangian transport of danger to vulnerable regions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>XY380</th>
<th>EGU2011-2414</th>
<th>Stefan Riha and Álvaro Júdice Peliz</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tracing the Mediterranean Outflow back into the Alboran Sea: A numerical modeling study</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>XY381</th>
<th>EGU2011-7931</th>
<th>Paul Williams, Peter Read, and Thomas Haine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Testing the limits of quasi-geostrophic theory</td>
</tr>
</tbody>
</table>

**ST3.2 – Ionospheric response to forcing from above and below – Orals**
Convener: Dalia Buresova | Co-Conveners: Olaf Amm, Dora Pancheva
*Room: 29*
Chairperson: n.n.

<table>
<thead>
<tr>
<th>Time</th>
<th>EGU2011-Numb</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>EGU2011-5159</td>
<td>Ryoichi Fujii, Olaf Amm, Akimasa Yoshikawa, Akimasa Ieda, and Heikki Vanhamäki</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reformulation and energy flow of the Cowling channel</td>
</tr>
<tr>
<td>08:45</td>
<td>EGU2011-7263</td>
<td>Robert Fear and Steve Milan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The formation of transpolar arcs</td>
</tr>
<tr>
<td>09:00</td>
<td>EGU2011-9333</td>
<td>Bodo W. Reinisch and Ivan Galkin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Simultaneous global radio observations of the ionosphere for assessment of forces from below and above</td>
</tr>
<tr>
<td>09:15</td>
<td>EGU2011-5539</td>
<td>Dimitry Pokhotelov, Cathryn N Mitchell, Michael H Denton, and Thayyil P Jayachandran</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polar cap dynamics during geomagnetic storms: large-scale ionospheric response</td>
</tr>
<tr>
<td>09:30</td>
<td>EGU2011-2768</td>
<td>Astrid Maute and Arthur Richmond</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aspects of modeling the high-latitude magnetosphere-ionosphere energy transfer</td>
</tr>
<tr>
<td>09:45</td>
<td>EGU2011-8884</td>
<td>Jeffrey M. Forbes, Xiaoli Zhang, and Gordon Shepherd</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Longitudinal Variations in the OI 5577A Green-Line Emission Observed by UARS/WINDII</td>
</tr>
</tbody>
</table>

**COFFEE BREAK**

Chairperson: n.n.

<table>
<thead>
<tr>
<th>Time</th>
<th>EGU2011-Numb</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30</td>
<td>EGU2011-8839</td>
<td>Stanley C. Solomon and Liying Qian</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Causes of Low Thermospheric Density During the 2007-2009 Solar Minimum</td>
</tr>
<tr>
<td>10:45</td>
<td>EGU2011-3770</td>
<td>John Emmert, Judith Lean, Michael Picone, Robert Meier, and Douglas Drob</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inter-cycle minima differences in thermospheric mass density, exospheric temperature, and ionospheric total electron content</td>
</tr>
<tr>
<td>11:00</td>
<td>EGU2011-1246</td>
<td>Eduardo Araujo-Pradere, Robert Redmon, and Tim Fuller-Rowell</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Comparative Study of the Global Ionospheric Behavior During Solar Cycle 22-23 and 23-24 Minima</td>
</tr>
<tr>
<td>11:15</td>
<td>EGU2011-4085</td>
<td>Eelco Doornbos and Hermann Lühr</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evaluation of empirical thermosphere density models using accelerometer observations during the recent solar minimum</td>
</tr>
<tr>
<td>11:30</td>
<td>EGU2011-4877</td>
<td>Jiuhou Lei, Jeffrey P. Thayer, Xinan Yue, and S. Tulasi Ram</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ionosphere and thermosphere variability during the solar minimum of solar cycles 23/24</td>
</tr>
</tbody>
</table>
Robert Pfaff, Henry Freudenreich, and Jeffrey Klenzing
DC electric fields, magnetic fields, and plasma waves observed on the C/NOFS satellite

ST3.2 – Ionospheric response to forcing from above and below – Posters
Convener: Dalia Buresova | Co-Conveners: Olaf Amm, Dora Pancheva
Hall Z | Display Time 08:00–17:00
Author in Attendance: 15:30–17:00
Chairperson: Olaf Amm

Z106 EGU2011-258
Chao Xiong and Hermann Lühr
Comparing electron density between IRI-2007 and CHAMP, GRACE observation during recent solar minimum

Z107 EGU2011-389
Huijun Le, Jann-Yenq Liu, and Libo Liu
A statistical analysis of ionospheric anomalies before 736 M > 6.0 earthquakes during 2002-2010

Z108 EGU2011-401
Yiding Chen, Libo Liu, and Weixing Wan
Can F10.7 Index Well Present Solar EUV Flux during Current Deep Solar Minimum?

Z109 EGU2011-3218
Christina Arras, Plamen Mukhtarov, Dora Pancheva, Christoph Jacobi, and Jens Wickert
Comparison of low-latitude sporadic E layer occurrence with tidal parameters obtained from SABER measurements

Z110 EGU2011-3876
Jesper Gjerloev and Robert Hoffman
Response of the Ionospheric Current System to Southward IMF Turnings

Z111 EGU2011-5012
Olaf Amm, Rumi Nakamura, Taku Takada, Kirsti Kauristie, Harald U. Frey, Christopher J. Owen, Anita Aikio, and Ritva Kuula
Modeling of ionospheric signatures of an auroral streamer during a double oval situation

Z112 EGU2011-6328
Dalia Buresova, Jan Lastovicka, and Josef Boska
Ionospheric F2 layer behavior during prolonged solar minimum

Z113 EGU2011-6342
Tatsuo Onishi and Jean-Jacques Berthelier
Numerical simulation of ionospheric disturbances associated with daytime MSTIDs

Z114 EGU2011-6817
Bjørn Lybekk, Arne Pedersen, Stein Haaland, Knut Svenes, Arnaud Masson, Matthew Taylor, and Andrew Fazakerley
Solar cycle variations of the Cluster spacecraft potential and its use for electron density estimations

Z115 EGU2011-12698
Katerina Podolska, Vladimir Truhlik, and Ludmila Triskova
Conditional Dependence of Main Ionospheric Characteristics and Solar and Geomagnetics Indices

Z116 EGU2011-13068
Ludmila Triskova, Vladimir Truhlik, and Katerina Podolska
Manifestation of forcing from below in the day-to-day correlation of mid latitude foF2 and the F10.7 index

ST3.4 – Advance in ionospheric research by incoherent scatter radars, related radio methods and novel large observational systems – Orals
Convener: Esa Turunen | Co-Conveners: Yasunobu Ogawa, Ingemar Hägström
Room: 29
Chairperson: Yasunobu Ogawa

13:30–13:45 EGU2011-13425
Anna Belehaki, Mike Hapgood, and Esa Turunen
ESPAS: The near-Earth space data infrastructure for e-Science

13:45–14:00 EGU2011-5665
Dimitry Pokhotelov, Olaf Amm, Johannes Norberg, Kirsti Kauristie, Markku Lehtinen, and Juha Vierinen
High-resolution multi-frequency ionospheric tomography in Scandinavia

14:00–14:15 EGU2011-10624
Antti Kero, Carl-Fredrik Enell, Esa Turunen, Ingemar Hägström, and Pekka Verronen
The high-latitude D-region ionosphere as seen by the EISCAT Svalbard continuous 1-year IPY radar experiment
14:15–14:30  EGU2011-13754
Bo Thidé and Fabrizio Tamburini
Probing Space with Radio and Radar Methods Based on Newly Recognised Symmetries of the Electromagnetic Field

14:30–14:45  EGU2011-11452
Ian McCrea, Esa Turunen, and The EISCAT_3D Project Team
Status and future plans of the EISCAT_3D Preparatory Phase Study

14:45–15:00  EGU2011-13062
Derek McKay and The KAIRA Project Team
KAIRA - Kilpisjärvi Atmospheric Imaging Receiver Array

**ST3.4 – Advance in ionospheric research by incoherent scatter radars, related radio methods and novel large observational systems – Posters**
Convener: Esa Turunen | Co-Conveners: Yasunobu Ogawa, Ingemar Häggström

**Hall Z | Display Time 08:00–17:00**

**Author in Attendance: 15:30–17:00**

**Chairperson: Esa Turunen**

Z117  EGU2011-5434
Yasunobu Ogawa, Genta Ueno, and Ingemar Häggström
Investigations of the upper polar atmosphere by incoherent scatter plasma line observations

Z118  EGU2011-10861
Hannah Vickers and Lisa Baddeley
An alternative estimation of the RF-enhanced plasma temperature during SPEAR artificial heating experiments

Z119  EGU2011-13106
Derek McKay-Bukowskii and The KAIRA Project Team
Lateral Thinking - Sharing Technology Across Disciplines

Z120  EGU2011-11896
Biagio Forte, Esa Turunen, and Ingemar Hagstrom
On the advantage of EISCAT(3D) measurements in technological applications

Z121  EGU2011-4196
Christos Haldoupis
Solar flare effects on the Earth's ionosphere as measured by the Arecibo incoherent scatter radar

Z122  EGU2011-13753
Tony van Eyken, Craig Heinselman, Esa Turunen, and Ingemar Häggström
Coordinated Incoherent Scatter Radar operations to advance STP System Science

**ST4.1/PS10.1 – Theory and simulations of solar system plasmas (co-organized) – Orals**
Convener: Jörg Büchner | Co-Conveners: Manfred Leubner, Gérard Belmont

**Room: 31**

**Chairperson: Gerard Belmont**

13:30–13:45  EGU2011-8295
Michael Hesse, Seiji Zenitani, and Joachim Birn
An Analytic Theory of Reconnection in MHD

13:45–14:00  EGU2011-12409
Marco Velli

14:00–14:15  EGU2011-7986
Melvyn Goldstein and Arcadi Usmanov
Theory and Simulation of Solar Wind Turbulence

14:15–14:30  EGU2011-9712
Roland Grappin and Gerard Belmont
Is there a turbulent cascade in the solar wind?

14:30–14:45  EGU2011-1556
Lev Zelenyi, Anton Artemyev, Anatolii Petrukovich, and Rumi Nakamura
Magnetotail thermal electrons as tracers of thin current sheets fine structure.

14:45–15:00  EGU2011-3875
Tom Chang and Cheng-chin Wu
Roma (Rank-Ordered Multifractal Analysis) of Intermittency in Space Plasmas

Chairperson: Gerard Belmont
Coronal heating and dynamics in a 3D magneto-hydrodynamic model

Whistler and Alfvén-Whistler Mode Emission from Magnetically Reconnecting Current Layers

Power-law Distributions in Homogeneous Plasmas - Statistical Approach

Turbulence-driven temperature anisotropy and constraining effects of the mirror instability in FLR-Landau fluid simulations

Electron acceleration at a quasi-perpendicular shock: Results of a 3-D full particle simulation

Numerical simulations of electron transport in the solar wind

Simulating chorus generation via Particle-in-cell simulations

Magnetohydrodynamic waves in partially ionized astrophysical plasmas: Application to oscillations in solar prominences

Magnetic double gradient instability in a compressible plasma current sheet

Magnetosheath Cavities in Hybrid Simulations

Grad-Shafranov reconstruction of magnetic clouds at 1 AU

Towards a global hybrid Vlasov magnetospheric model: A test particle simulation

Properties of the ion distribution function with velocity space holes

Coupling the solar dynamo and the corona: wind properties, mass and momentum losses during an activity cycle

The dynamic solar corona - simulation results for solar spacecraft missions

Anisotropy in MHD turbulence with mean field: zero parallel cascade?

Vlasov simulations of magnetic field-aligned potential drops

Effects of density inhomogeneities on the statistics of Langmuir waves in the solar wind
Rui Pinto and Roland Grappin
Alfvén wave driven polar plumes: dependence on the chromospheric conditions

Miroslav Báta and Jörg Büchner
Fragmentation of CME-generated current sheets via cascading reconnection

Gabriel Voitcu, Marius Echim, and Richard Marchand
Comparative study of forward and backward test-kinetic simulations to investigate anisotropic velocity distribution functions

Nicolas Aunai and Gerard Belmont
Kinetic mechanisms underlying the fluid description of the ions in magnetic reconnection

Lin-Ni Hau and B-j Wang
Generation of Nonlinear Magnetic Disturbances in the Solar Wind

DongSheng Cai, Bertrand Lembege, Ken-ichi Nishikawa, and Amin Esmaeili
Deformation of the cusp boundary during the IMF rotation from Northward to Southward: 3-D PIC large scale simulation

Andrey Divin, Stefano Markidis, Nikolay Erkaev, Vladimir Semenov, and Giovanni Lapenta
Structure of electron diffusion region of collisionless magnetic reconnection: theory and simulations.

Laurent Muschietti and Bertrand Lembege
Microturbulence in Front of a Supercritical Shock: Stimulation and Inverse Cascade of Waves in the Electron Cyclotron Frequency Range

Alexander Volokitin, Vladimir Krasnoselskih, and Eugeny Kuznetsov
Langmuir waves exited by an electron beam in plasma with density fluctuations

Gérard Belmont and Nicolas Aunai
Ion kinetic equilibrium for magnetopause-like tangential layers

Daniel Verscharen and Eckart Marsch
Compressive high-frequency waves riding on an Alfvén-cyclotron wave in a multi-fluid plasma

### PS5.0/ST6.1 – Planetary Plasma Physics, including electrodynamics of induced magnetospheres (co-organized) – Orals

Convener: Esa Kallio | Co-Conveners: Philippe Garnier, Hermann Opgenoorth, Mark Lester

**Room: 30**

**Chairperson:** n.n.

<table>
<thead>
<tr>
<th>Time</th>
<th>Code</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30–08:45</td>
<td>EGU2011-1675</td>
<td>Venus Express Magnetic Observations of the Venus Magnetotail</td>
<td>Tielong Zhang and Wolfgang Baumjohann</td>
</tr>
<tr>
<td>08:45–09:00</td>
<td>EGU2011-2416</td>
<td>New (or well forgotten) type of induced magnetosphere is observed at Venus</td>
<td>Eduard Dubinin, Markus Fraenz, Joachim Woch, Tielong Zhang, Stas Barabash, Rickard Lundin, and Andrey Fedorov</td>
</tr>
<tr>
<td>09:00–09:15</td>
<td>EGU2011-11090</td>
<td>Magnetic states of the ionosphere of Venus</td>
<td>Anne Angsmann, Markus Fraenz, Edik Dubinin, Joachim Woch, Stas Barabash, Tielong Zhang, and Uwe Motschmann</td>
</tr>
<tr>
<td>09:15–09:30</td>
<td>EGU2011-1325</td>
<td>Atmospheric escape from Venus and Mars during rough space weather</td>
<td>Niklas Edberg and the Mars &amp; Venus atmospheric escape Team</td>
</tr>
<tr>
<td>09:30–09:45</td>
<td>EGU2011-2326</td>
<td>Implications of solar wind forcing on the Venus polar ionosphere and thermosphere</td>
<td>Rickard Lundin</td>
</tr>
<tr>
<td>09:45–10:00</td>
<td>EGU2011-13308</td>
<td>Comparative study of magnetosheath intermittent turbulence at Venus and Earth</td>
<td>Marius M. Echim, Tielong Zhang, Dragos Constantinescu, and Tom Chang</td>
</tr>
</tbody>
</table>
EGU General Assembly 2011

COFFEE BREAK

Chairperson: n.n.

10:30–10:45  EGU2011-4086
Yoshifumi Saito, Shoichiro Yokota, Masaki Nishino, Tadateru Yamamoto, Kota Uemura, and Hideo Tsunakawa
Interaction between the Moon and the Earth's magnetosphere observed by MAP-PACE on Kaguya

10:45–11:00  EGU2011-305
Masaki N. Nishino, Xiao-Dong Wang, Masaki Fujimoto, Hideo Tsunakawa, Yoshifumi Saito, Shoichiro Yokota, Wei Bian, Chun-Lai Li, and Toshio Terasawa
Anomalous deformation of the Earth's bow shock in the lunar wake: Joint observations by Chang'E-1 and SELENE

11:00–11:15  EGU2011-695
Shahab Fatemi, Mats Holmström, and Yoshifumi Futaana
Modeling the solar wind proton velocity space distribution function in the near lunar wake

11:15–11:30  EGU2011-5563
Shoichiro Yokota, Yoshifumi Saito, Kazushi Asamura, Masaki Nishino, Hideo Tsunakawa, Hidetoshi Shibuya, Masaki Matsushima, Hisayoshi Shimizu, and Futoshi Takahashi
Structure and variation of the lunar exosphere

11:30–11:45  EGU2011-11431
Gabriella Stenberg, Hans Nilsson, Yoshifumi Futaana, Stas Barabash, Andrei Fedorov, and Dave Brain
On the Helium balance in the Martian atmosphere

11:45–12:00  EGU2011-10116
Gérard M. Chanteur, Ronan Modolo, and Eduard Dubinin
Dynamics of Solar Wind Helium ions in the Martian environment

LUNCH BREAK

Chairperson: n.n.

13:30–13:45  EGU2011-11179
Hermann Opgenoorth, Niklas Edberg, Mark Lester, Anthony Williams, Markus Fränz, David Morgan, and Olivier Witasse
Mars Ionospheric and Magnetospheric Response to Solar Wind Variability

13:45–14:00  EGU2011-8774
David Morgan, Donald Gurnett, Paul Withers, Erling Nielsen, Martin Paetzold, and Cyril Grima
Estimate of the Total Electron Content of the Martian Ionospheric M1 Layer from Mars Express Ionospheric Sounding

14:00–14:15  EGU2011-6192
Frantisek Nemec, David D. Morgan, Donald A. Gurnett, Firdevs Duru, and David A. Brain
Martian ionosphere observed by MARSIS: identification of plasma origin

14:15–14:30  EGU2011-6431
Markus Fränz, Eduard Dubinin, Erling Nielsen, Anne Angsmann, Joachim Woch, Stas Barabash, Rickard Lundin, Andrei Fedorov, and Tielong Zhang
Trans-terminator flow in the ionospheres of Mars and Venus

14:30–14:45  EGU2011-12488
Mathew Beharrell and Jim Wild
MGS observations of the magnetic field draping around Mars

14:45–15:00  EGU2011-9374
Valery Shematovich, Dmitri Bisikalo, Stas Barabash, Catherine Dieval, and Gabriella Stenberg
Monte Carlo modelling of the protons and hydrogen atoms transport in the Martian upper atmosphere

NP6.4/ST6.4 – Astrophysical Turbulence, Shocks and Plasmas (co-organized) – Orals
Convener: Luca Sorriso-Valvo | Co-Conveners: Jose M. Redondo
Room: 13
Chairperson: Luca Sorriso-Valvo

10:30–10:45  EGU2011-5381
Jiansen He, Chuanyi Tu, Eckart Marsch, Shuo Yao, and Hui Tian
Two-component magnetic helicity for two-component turbulent fluctuations
10:45–11:00  EGU2011-12663  Fouad Sahraoui, Melvyn L. Goldstein, Gerard Belmont, and Alessandro Retinó  Three dimensional anisotropic k-spectra of turbulence at sub-proton scales in the solar wind

11:00–11:15  EGU2011-2313  André Balogh and Silvia Perri  Variations of the residual energy parameter in the solar wind on different scales and in different types of heliospheric flows observed by Ulysses

11:15–11:30  EGU2011-3900  Xochitl Blanco-Cano, Ernesto Aguilar-Rodriguez, Primož Kajdi?, Christopher Russell, Lan Jian, and Janet Luhmann  Interplanetary shocks observed by STEREO

11:30–11:45  EGU2011-2254  Ersilia Leonardis, Sandra Chapman, and Claire Foullon  The spatio-temporal characteristics of magnetohydrodynamic turbulence seen in quiescent solar prominences by Hinode/SOT


NP6.4/ST6.4 – Astrophysical Turbulence, Shocks and Plasmas (co-organized) – Posters
Convener: Luca Sorriso-Valvo | Co-Conveners: Jose M. Redondo
Halls X/Y | Display Time 08:00–17:00
Author in Attendance: 13:30–15:00
Chairperson: Luca Sorriso-Valvo

XY382  EGU2011-5045  Khurom Kiyani, Fouad Sahraoui, Sandra Chapman, Yuri Khotyaintsev, and Bogdan Hnat  Magnetic compressibility and Isotropic Scale-Invariant Dissipation of Solar Wind Turbulence

XY383  EGU2011-3487  Bogdan Hnat, Sandra Chapman, and Khurom Kiyani  Evidence for a single stochastic physical process for fast solar wind magnetic field magnitude fluctuations at 1AU across turbulent and 1/f temporal scales

XY384  EGU2011-8085  Olga Alexandrova, Catherine Lacombe, and Andre Mangeney  Magnetic turbulence spectrum at electron scales in the solar wind

XY385  EGU2011-11765  Raffaele Marino, Luca Sorriso-Valvo, Vincenzo Carbone, Roberto Bruno, Pierluigi Veltri, and Alain Noullez  The magnetohydrodynamic turbulent cascade in polar solar wind: the role of local dynamic alignment

XY386  EGU2011-7867  Luca Sorriso-Valvo, Emiliya Yordanova, Vincenzo Carbone, and Silvia Perri  Multipoint measurement of solar wind turbulence anisotropy by Cluster

XY387  EGU2011-5619  Silvia Perri, Vincenzo Carbone, and Pierluigi Veltri  On the break of fluid-like turbulence: solar wind observations

XY388  EGU2011-8562  Andriy Koval and Adam Szabo  Magnetic field turbulence spectra observed by Wind from 1994 to 2010

XY389  EGU2011-3473  Hans-Jörg Fahr and Mark Siewert  Solar wind bulk velocity fluctuations inducing ion power law distributions

XY390  EGU2011-8599  Gaetano Zimbardo and Giuseppe Nistico'  Collisionless shocks in the solar corona: a mechanism for preferential heating of heavy ions

XY391  EGU2011-3572  David Burgess and Enrico Camporeale  The dissipation of solar wind turbulent fluctuations at electron scales: Simulations

XY392  EGU2011-8727  Zoltan Voros, Manfred Leubner, Tielong Zhang, Martin Volwerk, Andrea Optiz, and Roberto Bruno  Radial versus temporal evolution of fast stream turbulence in the solar wind

XY393  EGU2011-6645  Hervé Lamy, Marius Echim, and Tom Chang  Application of Rank-Ordered Multifractal Analyses (ROMA) to intermittent magnetic fluctuations in the Earth's magnetospheric cusp and in the high-speed solar wind.
NP6.6/ST6.5 – Magnetic reconnection and turbulence in Space, Laboratory and Astrophysical Systems (co-organized) – Orals
Convener: Giovanni Lapenta | Co-Conveners: Alex Lazarian
Room: 13
Chairperson: Lapenta, Lazarian

15:30–15:45 EGU2011-2666
**Giovanni Lapenta** and Lapo Bettarini
Effects of turbulent reconnection on the evolution of dipolarisation fronts in the Earth magnetotail.

15:45–16:00 EGU2011-12381
**Alexander Lazarian**
Diffusion of magnetic field and plasmas enabled by magnetic reconnection

16:00–16:15 EGU2011-6418
**Zoltan Voros**, Martin Volwerk, Manfred Leubner, Wolfgang Baumjohann, Tielong Zhang, and Andrei Runov
Magnetic reconnection associated fluctuations in the deep magnetotail: ARTEMIS results

16:15–16:30 EGU2011-11005
**Andrey Divin**, Giovanni Lapenta, Stefano Markidis, David Newman, and Martin Goldman
Electron holes at magnetic reconnection separatrices: the role of streaming instabilities.

16:30–16:45 EGU2011-10913
Mats André, Gabriella Stenberg, Andris Vaivads, **Yuri Khotyaintsev**, Alessandro Retinò, and Elizabeth Lucek
Magnetic reconnection in a turbulent space plasma: Cluster multi-spacecraft observations in the magnetosheath

16:45–17:00 EGU2011-12774
**Grzegorz Kowal**, Alex Lazarian, Ethan Vishniac, and Katarzyna Otmianowska-Mazur
Numerical Testing of Magnetic Reconnection in the Presence of Turbulence

NP6.6/ST6.5 – Magnetic reconnection and turbulence in Space, Laboratory and Astrophysical Systems (co-organized) – Posters
Convener: Giovanni Lapenta | Co-Conveners: Alex Lazarian
Halls X/Y | Display Time 08:00–17:00
Author in Attendance: 13:30–15:00
Chairperson: Divin, Kowal

XY394 EGU2011-4460
**Haoyu Lu** and Jinbin Cao
Study on Switch-off Magnetic Reconnection Due to the Parallel Shear Flow

XY395 EGU2011-2676
**Pierre Henri**, Giovanni Lapenta, Stefano Markidis, Lapo Bettarini, Stefan Eriksson, Laila Andersson, Martin Goldman, and David Newman
Kinetic Study of Asymmetric Magnetic Reconnection

XY396 EGU2011-2673
**Stefano Markidis**, Martin Goldman, Giovanni Lapenta, Pierre Henry, David Newman, Laila Andersson, Maria Elena Innocenti, and Andrey Divin
Role of Instabilities in Kinetic Magnetic Reconnection

XY397 EGU2011-10232
**Yuri Khotyaintsev**, Christopher Cully, Andris Vaivads, Mats André, and Christopher J. Owen
Whistler-mode Waves and Non-Adiabatic Electrons in Plasma Jet Braking

XY398 EGU2011-12500
**Konrad Bajer** and Krzysztof Mizerski
Enhancement of turbulence by elliptical instability with background rotation

XY399 EGU2011-13226
**Andrey Beresnyak**
Basic Properties of MHD Turbulence