

**EGU General Assembly 2012
Programme Group Programme
ST – Solar-Terrestrial Sciences**

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Monday, 23 April

ST1.4 – Theory, simulations and observations of magnetic dynamos – Posters

Convener: G. Nigro | Co-Conveners: L. Primavera, L. Bettarini

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Giuseppina Nigro

XY673 EGU2012-11934

E. Kim and A.P. Newton

Statistical theory of dynamo

XY674 EGU2012-13471

J. A. Abreu, J. Beer, A. Ferriz-Mas, K. G. McCracken, and F. Steinhilber

Torsional oscillations seen in the record of cosmogenic isotopes?

ST2.1 – Open session on the magnetosphere (including Julius Bartels Medal Lecture) – Orals

Convener: S. Milan | Co-Conveners: N. Ganushkina

Room: 24

Chairperson: Steve Milan

08:30–08:45 EGU2012-1381

P. Newell and J. Gjerloev

Substorm and Magnetosphere Characteristic Scales Inferred from the SuperMAG Auroral Electrojet Indices

08:45–09:00 EGU2012-8255

J. A. Hutchinson, **D. M. Wright**, S. E. Milan, A. Grocott, and P. D. Boakes

Investigating the Importance of Viscous Interactions on Ionospheric Convection via Comparisons of Open-Closed Boundaries (OCBs) and Convection Reversal Boundaries (CRBs)

09:00–09:15 EGU2012-1486

J. W. Gjerloev and P. Newell

Introducing the local time ring current indices SMR: Validation and Insight

09:15–09:30 EGU2012-1922

K.J. Trattner, F. Allegrini, M.A. Dayeh, H.O. Funsten, S.A. Fuselier, D. Heitzler, P. Janzen, H.

Kucharek, D.J. McComas, E. Moebius, T.E. Moore, S.M. Petrinec, D.B. Reisenfeld, N.A. Schwadron, and P. Wurz

The free escape boundary of diffuse ions upstream of the Earth's quasi-parallel bow shock

09:30–09:45 EGU2012-2996

H. L. Pécseli, **H. Sato**, S. Børve, and J. K. Trulsen

Minute-scale period oscillations of the magnetosphere

09:45–10:00 EGU2012-3431

A.W. Yau, A. Howarth, W.K. Peterson, and T. Abe

Pre-Storm Ionospheric Oxygen Ions between the Ionosphere and the Inner Magnetosphere

COFFEE BREAK

Chairperson: Jesper Gjerloev

10:30–10:45 EGU2012-4860

A.M. Du, B.T. Tsurutani, and W. Sun

Solar Wind Energy Input during Prolonged, Intense Northward Interplanetary Magnetic Fields: A New Coupling Function

10:45–11:00 EGU2012-7499

S. E. Milan, J. S. Gosling, and B. Hubert

Parameterizing the Magnetopause Reconnection Rate from Observations of the Expanding Polar Cap

11:00–11:15 EGU2012-9505

S. M. Imber, S. E. Milan, and M. Lester

SuperDARN observations of an unusually contracted ionospheric convection pattern during the recent deep solar minimum

11:15–11:30 EGU2012-9661

R. Maggiolo and L.M. Kistler

2D O⁺ and H⁺ density profile in the magnetospheric equatorial plane

- 11:30–11:45 EGU2012-9752
G. Facskó, A. Opitz, J-A. Sauvaud, A. Fedorov, B. Lavraud, A. B. Galvin, A. Szabo, C. T. Russel, J. G. Luhmann, and M. Palmroth
 STEREO hot flow anomaly observations during Earth orbit phase and in the deep geotail
- 11:45–12:00 EGU2012-10642
 E. Kronberg, **S. E. Haaland**, P.W. Daly, E. E. Grigorenko, M. Fränz, L. M. Kistler, and I. Dandouras
 Acceleration of the oxygen and protons in the terrestrial magnetosphere

LUNCH BREAK

Chairperson: Natalia Ganjushkina

- 13:30–14:30 EGU2012-14464
M. Lockwood
 Solar change on timescales of days to millennia: evidence and implications (Julius Bartels Medal Lecture)
- 14:30–14:45 EGU2012-10755
G. Branduardi-Raymont and the AXIOM Team
 Global X-ray Imaging of the Earth's Magnetosphere
- 14:45–15:00 EGU2012-13251
P. J. Chi and The McMAC Team
 Sounding of the Plasmasphere by McMAC Magnetometers

ST2.1 – Open session on the magnetosphere (including Julius Bartels Medal Lecture) – Posters

Convener: S. Milan | Co-Conveners: N. Ganushkina

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Steve Milan

- XY676 EGU2012-2594
P.R. Sutcliffe and H. Lühr
 CHAMP observations of Pc3 pulsations in the polar cusp region
- XY677 EGU2012-2643
J. P. Reistad, N. Østgaard, K. M. Laundal, and K. Oksavik
 Non-conjugate aurora and inter hemispheric currents
- XY678 EGU2012-3556
J.-H. Shue
 Responses of the magnetic structure of the magnetotail to southward turnings of the IMF: Multiple observations
- XY679 EGU2012-3935
X. Zhao and A. Du
 The Study of the Geomagnetic Variation for Sq current System
- XY680 EGU2012-4213
C. R. Anekallu and M Palmroth
 Initial statistical results on the spatial variation of energy conversion at the Earth's magnetopause
- XY681 EGU2012-4250
S. Haaland, K. Svenes, B. Lybekk, and A. Pedersen
 Density holes in the cusp and polar cap regions
- XY682 EGU2012-4525
M. Piersanti and U. Villante
 Sudden Impulses: the discrimination between magnetospheric and ionospheric contributions in ground manifestations.
- XY683 EGU2012-4918
C. de paulis and U. Villante
 On the ubiquitous transmission of upstream waves to the magnetosphere: an analysis of case events.
- XY684 EGU2012-4935
C. Johnsen, N. Østgaard, and S. Haaland
 Mass lost from the atmosphere through ion-outflow
- XY685 EGU2012-5055
 N Longden, **G Chisham**, and MP Freeman
 A model that explains the nature of reconnection-related fluctuations in the open-closed magnetic field line boundary location in the ionosphere

- XY686 EGU2012-5694
P.D. Boakes, R. Nakamura, M. Volwerk, W. Baumjohann, and S.E. Milan
ECLAT Cluster Magnetotail Plasma Region Identification
- XY687 EGU2012-5802
I. Mann and M. Hamrin
Does the presence of cosmic dust influence the displacement of the Earth's Magnetopause?
- XY688 EGU2012-6751
Q. Shi
Plasma transport and flow properties from Multi-point observations
- XY689 EGU2012-6989
P. Tenfjord and N. Østgaard
On the solar wind-magnetosphere energy coupling function
- XY690 EGU2012-7036
B. Delpont, A. B. Collier, and **E. J. Koen**
Statistics of Whistlers Received at both Rothera and SANAE IV
- XY691 EGU2012-7770
Aysegul Ceren Moral, Zerefsan Kaymaz, Filiz Turk Kat?rc?oglu, and David G. Sibeck
Characteristics of Low Shear Plasma Depletion Layer
- XY692 EGU2012-7835
P. Francia, M. De Lauretis, and M. Regi
ULF activity along SEGMA array during low solar wind density conditions
- XY693 EGU2012-387
B. Nanan and D Vijaya Lakshmi
UT midnight preference for the onset of geomagnetic storms
- XY694 EGU2012-7842
M. He, J. Vogt, E. Sorbalo, and A. Blagau
An empirical model of field-aligned currents derived from CHAMP magnetic field data
- XY695 EGU2012-8106
J. Lichtenberger, A. B. Collier, M. Clilverd, A. Jorgensen, C. Rodger, M. Vellante, R. Friedel, **B. Heilig**, R. H. Holzworth, J. Manninen, and J. Reda
PLASMON: Progress in Characterising the Plasmasphere
- XY696 EGU2012-9387
G. Facskó, E. Gordeev, M. Palmroth, I. Honkonen, P. Janhunen, V. Sergeev, K. Kauristie, and S. Milan
Development and validation of the European Cluster Assimilation Techniques run libraries
- XY697 EGU2012-9504
M. Regi, P. Francia, M. De Lauretis, and U. Villante
A statistical analysis of the occurrence of upstream waves in the foreshock region.
- XY698 EGU2012-9647
G. Facskó, T. Laitinen, M. Kangwa, L. Degener, C. R. Anekallu, H. Koskinen, E. Tanskanen, and M. Palmroth
The preliminary results of the Boundary Layer Identification Code project
- XY699 EGU2012-10341
B. Heilig, V. Pilipenko, and P. Sutcliffe
Interhemispheric asymmetry of the amplitudes of Pc3 geomagnetic pulsations
- XY700 EGU2012-12087
P. De Michelis, G. Consolini, and R. Tozzi
Large geomagnetic storms: A multi-scale analysis

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

Convener: E. Tanskanen | Co-Conveners: R. Nakamura, C. Jackman, S. Imber

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY701 EGU2012-6126
C.M. Jackman, S.V. Badman, N. Achilleos, E.J. Bunce, S.W.H. Cowley, A. Radioti, D. Grodent, M.K. Dougherty, and W. Pryor
Auroral counterpart of magnetic field dipolarizations in Saturn's tail
- XY702 EGU2012-1283
M. Volwerk, N. Andre, C. Arridge, F. Bagenal, J. Birn, C. Jackman, X. Jia, A. Kidder, S. Milan, A. Radioti, M. Vogt, A. Walsh, R. Nakamura, A. Masters, and C. Forsyth
Comparative Magnetotail Flapping: An Overview of Selected Events at Earth, Jupiter and Saturn

- XY703 EGU2012-3168
T. Sundberg, J. A. Slavin, S. A. Boardsen, B. J. Anderson, H. Korth, J. M. Raines, T. H. Zurbuchen, G. A. DiBraccio, G. Gloeckler, G. C. Ho, M. Sarantos, S. M. Krimigis, R. L. McNutt, Jr., D. N. Baker, and S. C. Solomon
 MESSENGER observations of dipolarization events in Mercury's magnetotail
- XY704 EGU2012-2123
K. Grygorov, L. Prech, J. Safrankova, and Z. Nemecek
 Statistical study of the Earth's distant magnetotail: Wind observations
- XY705 EGU2012-5004
A.M. Du and T.L. Zhang
 Interplanetary shock passed through the Earth's magnetosphere
- XY706 EGU2012-10498
A. Alexandrova, R. Nakamura, V. Semenov, S. Apatenkov, D. Korovinskiy, H. Biernat, W. Baumjohann, V. Sergeev, S. Kiehas, and V. Angelopoulos
 Estimation of the magnetotail reconnection parameters from a remote lobe observation by ARTEMIS spacecraft
- XY707 EGU2012-8406
 K. Snekvik, **E. Tanskanen**, N. Østgaard, L. Juusola, K. Laundal, E. I. Gordeev, and A. L. Borg
 Changes in the magnetotail configuration before near-Earth reconnection
- XY708 EGU2012-5019
 E. Davey, **M. Lester**, S. E. Milan, R.C. Fear, and C. Forsyth
 The effects of substorms and storms on the magnetotail
- XY709 EGU2012-14437
E. Gordeev, M. Amosova, and V. Sergeev
 IMF Bx effect on the magnetotail neutral sheet geometry and dynamics
- XY710 EGU2012-4663
E.V. Panov, R. Nakamura, W. Baumjohann, M.G. Kubyshkina, A.V. Artemyev, V.A. Sergeev, A.A. Petrukovich, V. Angelopoulos, K.-H. Glassmeier, J.P. McFadden, and D. Larson
 Kinetic Ballooning/Interchange Instability in a Bent Plasma Sheet
- XY711 EGU2012-10901
J.-M. Jahn, M. A. Dayeh, and H. A. Elliott
 Dynamics of Earth's Magnetotail Observed in a Cross-Tail View
- XY712 EGU2012-3669
K. Li, S. Haaland, A. Eriksson, E. Kronberg, M. Fraenz, and P. Daly
 On the source region of cold ions escaping from Earth's polar caps
- XY713 EGU2012-9648
T. Asikainen, V. Maliniemi, and K. Mursula
 Monitoring the tail current contribution to the Dcx index with NOAA/POES satellites: differences between CME and HSS driven storms
- XY714 EGU2012-3267
A. Boudouridis, E. Zesta, L. R. Lyons, H.-J. Kim, D. Lummerzheim, M. Wiltberger, J. M. Weygand, J. M. Ruohoniemi, and A. J. Ridley
 Comparison of ionospheric convection and the transpolar potential before and after solar wind dynamic pressure fronts: implications for magnetospheric reconnection
- XY715 EGU2012-5735
J. Raeder, P. Zhu, and Y. S. Ge
 Tail Ballooning Modes in Global Simulations at Substorm Onset
- XY716 EGU2012-2585
I. Honkonen, M. Palmroth, T.I. Pulkkinen, and P. Janhunen
 Solar wind dependence and ionospheric mapping of magnetotail plasmoids
- XY717 EGU2012-5781
G. Fruit, P. Louarn, A. Tur, J. A. Sauvaud, A. Fazakerley, and M. Andre
 The effect of the temperature ratio T_e/T_i on the stability of a 2D current sheet.

ST3.4 – Dynamical Processes in the High-Latitude Ionosphere – Posters

Convener: J. Moen | Co-Conveners: E. Turunen, K. Hosokawa

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: K. Hosokawa and E. Turunen

- XY718 EGU2012-1605
G. Kervalishvili and H. Lühr
 The thermospheric mass density anomaly at polar latitudes: a comparison of CHAMP and GRACE observations

- XY719 EGU2012-2141
J. A. Cumnock, G. Le, Y. Zhang, and J. A. Slavin
Multipoint Observations of Oval-aligned Transpolar Arc Formation using ST5 and DMSP
- XY720 EGU2012-2591
K. Hosokawa, J. I. Moen, P. T. Jayachandran, K. Shiokawa, and Y. Otsuka
An unusual strolling motion of polar cap patches: an implication of the influence of tail reconnection on the nightside polar cap convection
- XY721 EGU2012-3991
Q.-H. Zhang, B. -C. Zhang, R. -Y. Liu, M. W. Dunlop, M. Lockwood, J. Moen, H. -G. Yang, H. -Q. Hu, Z. -J. Hu, S.-L. Liu, I. McCrea, and M. Lester
On the importance of IMF |BY| on polar cap patch formation
- XY722 EGU2012-4172
J. Moen, K. Hosokawa, and **N. Gulbrandsen**
On the IMF BY dependence on polar cap patch exits at night
- XY723 EGU2012-4582
M. Hayosh, D. Pasmanik, A. Demekhov, O. Santolík, E. Titova, and **M. Parrot**
Simultaneous observations of quasi-periodic ELF/VLF wave emissions and energetic-electron precipitation by DEMETER
- XY724 EGU2012-6568
DM Wright, JA Davies, and RJ Strangeway
Observations of ion outflows at high-latitudes derived from ground-based radar and spacecraft measurements
- XY725 EGU2012-7282
H. Lamy, M. Echim, and C. Simon Wedlund
On estimating the properties of the auroral magnetospheric generator from ionospheric observations of discrete auroral arcs and a magnetosphere-ionosphere coupling.
- XY726 EGU2012-8857
L. Cai, A. Aikio, T. Nygren, and R. Kuula
Height-resolved energy exchange rates in the ionosphere
- XY727 EGU2012-10416
D.K. Whiter, B.S. Lanchester, N.I.B. Jallo, B. Gustavsson, and N. Ivchenko
Relative brightness of the O+(2D-2P) doublets in low energy aurora
- XY728 EGU2012-11252
S. Tuttle, B. Lanchester, B. Gustavsson, and N. Ivchenko
Estimation of ionospheric electric fields using modelling of metastable auroral emissions
- XY729 EGU2012-12223
C.L. Simon Wedlund, **H. Lamy**, B. Gustavsson, T. Sergienko, U. Brändström, and J. De Keyser
Auroral electron fluxes and characteristic energy of precipitating electrons inferred by ALIS and EISCAT
- XY730 EGU2012-13269
E. Turunen, A. Kavanagh, and I. Häggström
Solar wind control of ionization enhancements in D Region during solar minimum as seen by the EISCAT Svalbard Radar

PS5.3/ST6.4 – Planetary, Solar and Heliospheric Radio Emissions (co-organized) – Orals

Convener: P. H. M. Galopeau | Co-Conveners: M. Y. Boudjada

Room: 28

Chairperson: Patrick H. M. Galopeau

- 08:30–08:45 EGU2012-1305
G. Mann, C. Vocks, and F. Breitling
First LOFAR's Observation of a Solar Radio Burst
- 08:45–09:00 EGU2012-2081
U. Ganse, P. Kilian, F. Spanier, and R. Vainio
Kinetic Simulations of Solar Type II Radio Burst Emission
- 09:00–09:15 EGU2012-3715
P. J. Kellogg, K. Goetz, and S.J. Monson
Z-Mode and Langmuir wave decay in the solar wind
- 09:15–09:30 EGU2012-2423
A.A. Kuznetsov and V.G. Vlasov
Kinetic simulation of the electron-cyclotron maser instability: effect of a finite source size
- 09:30–09:45 EGU2012-3203
D. J. Menietti, Y. Y. Shprits, R. B. Horne, G. B. Hospodarsky, J. F. Carbary, and D. A. Gurnett
Chorus emission and electron acceleration at Saturn and Jupiter
- 09:45–10:00 EGU2012-4949
A. Lecacheux
Stereoscopic analysis of Jovian DAM by using STEREO/WAVES experiment

PS5.3/ST6.4 – Planetary, Solar and Heliospheric Radio Emissions (co-organized) – Posters

Convener: P. H. M. Galopeau | Co-Conveners: M. Y. Boudjada

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Mohammed Y. Boudjada

- XY471 EGU2012-3316
S.V. Golubev, D.A. Mansfeld, M.E. Viktorov, I.V. Izotov, A.V. Vodopyanov, A.G. Demekhov, and A.G. Shalashov
Laboratory modeling of pulsed regimes of electron cyclotron instabilities
- XY472 EGU2012-9897
S. L. McConville, D. C. Speirs, K. M. Gillespie, A. D. R. Phelps, A. W. Cross, M. E. Koepke, C. G. Whyte, K. Matheson, C. W. Robertson, R. A. Cairns, I Vorgul, R Bingham, B. J. Kellett, and K Ronald
Scaled experimental investigation of the moderation of auroral cyclotron emissions by background plasma
- XY473 EGU2012-12135
D. C. Speirs, R. Bingham, R. A. Cairns, B. J. Kellett, S. L. McConville, K. M. Gillespie, I. Vorgul, A. D. R. Phelps, A. W. Cross, and K. Ronald
Numerical simulation of auroral magnetospheric cyclotron emission processes
- XY474 EGU2012-1792
T.H. Oswald, M. Sampl, H.O. Rucker, D. Plettemeier, and M. Maksimovic
Numerical studies of the Solar Orbiter RPW antennas
- XY475 EGU2012-9905
V. N. Melnik, A. A. Konovalenko, **H. O. Rucker**, A. I. Brazhenko, C. Briand, V. V. Dorovskyy, P. Zarka, L. Denis, V. G. Bulatzen, A. V. Frantuzenko, and A. A. Stanislavskyy
Simultaneous observations of solar sporadic radio emission by the radio telescopes UTR-2, URAN-2 and NDA within the frequency range 8-41MHz
- XY476 EGU2012-12792
A.G. Stupishin, V.M. Bogod, T.I. Kaltman, and L.V. Yasnov
On the Structure of Magnetic Field and Radioemission of Sunspot-related Source in Solar Active Region
- XY477 EGU2012-13573
A.G. Stupishin, V.M. Bogod, and L.V. Yasnov
On the Sources Above the Neutral Line of Radial Magnetic Fields
- XY478 EGU2012-8799
T. Burinskaya and J.-L. Rauch
Auroral Kilometric Radiation from a nonstationary thin plasma cavity
- XY479 EGU2012-11037
M. Mogilevsky, **T. Romantsova**, I. Moiseenko, T. Bosenger, M. Rietveld, and J. Hanasz
Dumping of auroral kilometric radiation caused by HF heating facility
- XY480 EGU2012-2774
M. Y. Boudjada, P.H.M. Galopeau, M.M. Mogilevski, S. Sawas, J. Blecki, J.J. Berthelie, and W. Voller
Study of sub-auroral radio emissions observed by ICE experiment onboard DEMETER satellite
- XY481 EGU2012-2227
M. Y. Boudjada and P.H.M. Galopeau
Local time dependence of Io plasma torus
- XY482 EGU2012-10057
P. H. M. Galopeau and M. Y. Boudjada
Polarization of Jovian DAM emission as inferred from active longitude model
- XY483 EGU2012-9861
P. H. M. Galopeau
Spin modulation periods in Saturn's radio emission as a possible signature of inner dynamo
- XY484 EGU2012-8341
V. Zakharenko, A. Konovalenko, V. Kolyadin, **P. Zarka**, J.-M. Grissmeier, K. Mylostna, G. Litvinenko, M. Sidorchuk, H. Rucker, B. Cecconi, A. Coffre, L. Denis, V. Shevchenko, V. Nikolaenko, and G. Fisher
Search and study of lightnings on planets of the Solar System
- XY485 EGU2012-12513
A.A. Konovalenko, V.L. Koliadin, A.I Boiko, Ph. Zarka, J.-M. Griessmeier, L. Denis, A. Coffre, H.O Rucker, V.N. Melnik, A.A. Stanislavsky, S.V. Stepkin, D.V. Mukha, A. Brazhenko, M. Leitzinger, P. Odret, and M. Scherf
Progress in the search of decametric radio emission from active stars and exoplanets at the UTR-2 radio telescope

Tuesday, 24 April

ST1.4 – Theory, simulations and observations of magnetic dynamos – Orals

Convener: G. Nigro | Co-Conveners: L. Primavera, L. Bettarini

Room: 7

Chairperson: Lapo Bettarini

- 13:30–13:45 EGU2012-1514
D. Sokoloff
 Long-term dynamics of solar cycle, geomagnetic reversals and fluctuations of dynamo governing parameters
- 13:45–14:00 EGU2012-2284
F. Plunian and R. Stepanov
 MHD dynamo turbulence for realistic magnetic Prandtl and Reynolds numbers
- 14:00–14:15 EGU2012-2154
M. Dikpati
 Is a high-latitude, second, reversed meridional flow cell the Sun's common choice?
- 14:15–14:30 EGU2012-3577
M.E. Artyushkova, H.P. Popova, and D.D. Sokoloff
 Modeling of the solar interface dynamo
- 14:30–14:45 EGU2012-2444
A. C.-L. Chian, A. Brandenburg, M. R. E. Proctor, and E. L. Rempel
 On-off intermittency and Lagrangian coherent structures in solar dynamo
- 14:45–15:00 EGU2012-1661
A. Giesecke, F. Stefani, and G. Gerbeth
 Soft iron and axisymmetric eigenmodes in the von-Karman-Sodium dynamo

ST1.5 – 3D structure and physical nature of the global heliosphere – Orals

Convener: V. V. Izmodenov | Co-Conveners: P. Wurz, H. Fichtner

Room: 2

Chairperson: V. Izmodenov

- 08:30–08:45 EGU2012-3933
E. C. Stone
 Voyager and the Interaction of the Heliosheath with the Interstellar Wind: An Overview
- 08:45–09:00 EGU2012-6086
J.D. Richardson
 Voyager observations of plasma in the heliosheath
- 09:00–09:15 EGU2012-1919
S. Krimigis, R. Decker, E. Roelof, and M. Hill
 The Voyagers in the 3-D Heliosheath: Transition in Intensities, Flows, and Velocities
- 09:15–09:30 EGU2012-6653
 N. Schwadron and **IBEX Team**
 Discovering the Global Heliosphere: The Interstellar Boundary Explorer Mission Charts the Outer Boundaries of Our Solar System and Beyond
- 09:30–09:45 EGU2012-3261
E. Roelof, S. Krimigis, D. Mitchell, R. Decker, and K. Dialynas
 ENA Images of the Heliosheath (5-55 keV) from Cassini/INCA: Updated with data 2010-2012
- 09:45–10:00 EGU2012-1767
H.-J. Fahr
 Passage of the multi-species solar wind plasma over the termination shock determining the heliosheath plasma conditions

ST1.5 – 3D structure and physical nature of the global heliosphere – Posters

Convener: V. V. Izmodenov | Co-Conveners: P. Wurz, H. Fichtner

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: P. Wurz

- XY656 EGU2012-2487
L. Saul, P. Wurz, D. Rodriguez, D. McComas, S. Fuselier, E. Möbius, H. Kucharek, and Bzowski
 Local Interstellar Hydrogen Variability observed by IBEX

- XY657 EGU2012-2704
M. Siewert, H.-J. Fahr, D. J. McComas, and N. A. Schwadron
Spectral properties of ENA fluxes from the inner heliospheric source
- XY658 EGU2012-2747
O. A. Katushkina, V. V. Izmodenov, and E. Quemerais
Intensities of backscattered solar Lyman-alpha radiation: comparison of kinetic models with SOHO/SWAN data
- XY659 EGU2012-3249
K. Dialynas, S. Krimigis, D. Mitchell, E. Roelof, and R. Decker
Multi-coordinate System (Ecliptic, Galactic, ISMF) Spectral Analysis of Heliospheric ENA Emissions Using Cassini/INCA Measurements
- XY660 EGU2012-4723
J.M. Sokol, M.A. Kubiak, M. Bzowski, M. Tokumaru, K. Fujiki, D.J. McComas, and P. Bochsler
Solar wind evolution since 1990 and H ENA ionization rates and survival probabilities in the heliosphere
- XY661 EGU2012-5502
E. A. Provornikova, M. Opher, and V.V. Izmodenov
Do shocks associated with merged interaction regions in the supersonic solar wind survive in the heliosheath?
- XY662 EGU2012-5776
R. Kallenbach and M. Hilchenbach
Energetic Neutral Atoms of Heliospheric Origin Observed by SOHO/CELIAS/HSTOF
- XY663 EGU2012-7303
S. V. Chalov
Thermal plasma flow and properties of energetic particles in the heliospheric shock layer
- XY664 EGU2012-7487
M. Bzowski
Latest IBEX discoveries on the neutral interstellar helium flow parameters (solicited)
- XY665 EGU2012-7725
V. V. Izmodenov and D.B. Alexashov
Primary and secondary populations of the interstellar oxygen in 3D heliosphere
- XY666 EGU2012-8033
M.A. Kubiak, **M. Bzowski**, J.M. Sokol, E. Moebius, D. Heitzler, D.B. Alexashov, V.V. Izmodenov, P. Bochsler, and D.J. McComas
Secondary population of neutral interstellar helium observed by IBEX-Lo: preliminary analysis
- XY667 EGU2012-8411
S. Grzedzielski, **J.M. Sokol**, and M. Bzowski
Structure functions study of the hydrogen energetic neutral atom (H ENA) data observed with IBEX
- XY668 EGU2012-8589
C. Drews, L. Berger, and R. F. Wimmer-Schweingruber
Inflow Direction of Interstellar Neutrals deduced from Pickup Ion Measurements at 1 AU
- XY669 EGU2012-9161
M. Strumik, L. Ben-Jaffel, R. Ratkiewicz, and J. Grygorczuk
Comparison of heliospheric models with observations of the Voyager and Ixex spacecraft
- XY670 EGU2012-9981
H. Kucharek, M. A. Lee, E. Moebius, and N. Pogorelov
Ion Distributions and ENA Production at the Heliospheric Termination Shock: Theory and Simulations
- XY671 EGU2012-12762
K. Mursula and I. Virtanen
The wide skirt of the bashful ballerina: Hemispheric asymmetry of the heliospheric magnetic field in the inner and outer heliosphere

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

Convener: M. Taylor | Co-Conveners: C.-P. Escoubet, M. Dunlop

Room: 27

Chairperson: Malcolm Dunlop

- 15:30–15:45 EGU2012-10554
C. Forsyth, A. N. Fazakerley, A. P. Walsh, and C. J. Owen
Cluster multi-point observations in the auroral region: A critical examination of accelerated particle spectra
- 15:45–16:00 EGU2012-2059
H. Fu, Y. Khotyaintsev, A. Vaivads, M. André, and S. Huang
Single and multi-spacecraft analysis of the electric field at the dipolarization front
- 16:00–16:15 EGU2012-5199
B.M. Walsh, S.E. Haaland, P.W. Daly, E.A. Kronberg, and T.A. Fritz
Loss of energetic particles from the Earth's Magnetosphere

- 16:15–16:30 EGU2012-2037
R. Nakamura, W. Baumjohann, M. Volwerk, and E. Panov
 Changes in the rapid flux transport rate observed by Cluster
- 16:30–16:45 EGU2012-6389
M. André, C. M. Cully, H. Opgenoorth, D. Andrews, J.-E. Wahlund, H. Nilsson, and G. Stenberg
 Low-energy ions: More common than we thought around Earth, Mars and Titan
- 16:45–17:00 EGU2012-8135
G. Balasis, I. A. Daglis, M. Georgiou, C. Papadimitriou, A. Anastasiadis, I. Sandberg, and R. Haugmans
 Multi-satellite, multi-instrument and ground-based observations analysis and study of ULF wave phenomena and products

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

Convener: M. Taylor | Co-Conveners: C.-P. Escoubet, M. Dunlop

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Malcolm Dunlop

- XY672 EGU2012-1388
D. L. Turner, V. Angelopoulos, D. G. Sibeck, M. Hartinger, F. Plaschke, A. Kellerman, J. Weygand, and R. Michell
 The global impacts of foreshock phenomena on Earth's magnetosphere-ionosphere system
- XY673 EGU2012-1678
J. Safrankova, Z. Nemecek, L. Prech, and G. N. Zastenker
 BMSW - Fast solar wind monitor in operation
- XY674 EGU2012-1683
O. Goncharov, J. Safrankova, Z. Nemecek, L. Prech, J. Enzl, and G. N. Zastenker
 Interplanetary shocks: Influence of upstream conditions on shock front parameters
- XY675 EGU2012-1684
G. Granko, J. Safrankova, Z. Nemecek, K. Jelinek, and A. Samsonov
 Influence of a quasi-radial IMF on the magnetopause position
- XY676 EGU2012-1853
J. Simunek, O. Tkachenko, G. Granko, J. Safrankova, and Z. Nemecek
 Observations of the cold dense plasma at the magnetopause
- XY677 EGU2012-1855
J. Urbar, K. Jelinek, L. Prech, J. Safrankova, and Z. Nemecek
 Modification of the solar wind upstream of the Earth's bow shock: THEMIS observations
- XY678 EGU2012-1991
M. Nowada, S. -Y. Fu, G. K. Parks, Z. -Y. Pu, V. Angelopoulos, C. W. Carlson, and H. -U. Auster
 Magnetic Flux Transport and Pressure Variations at Magnetotail Plasma Flow Bursts during Geomagnetically Quiet Times
- XY679 EGU2012-2179
 Q. -H. Zhang, **M. W. Dunlop**, M. Lockwood, B. Lavraud, Y. Bogdanova, Z. Pu, H. Hasegawa, J. Wang, M.G.G.T. Taylor, J. Berchem, D. Constantinescu, M. Volwerk, H. Frey, A.N. Fazakerley, C. Shen, J-K. Shi, D. Sibeck, P. Escoubet, J. Eastwood, and J. Wild
 Inner plasma structure of the low latitude reconnection layer
- XY680 EGU2012-4212
A. Pedersen, B. Lybekk, S. Haaland, K. Svenes, I. Dandouras, and A. N. Fazakerley
 Magnetic field-aligned electrons escaping from plasma density minima in the cusp
- XY681 EGU2012-4417
M. Wu and Q. Lu
 Transverse instability and magnetic structures associated with electron phase space holes
- XY682 EGU2012-5043
 J. De Keyser and **F. Darrouzet**
 On the role of systematic errors in multi-spacecraft gradient computation
- XY683 EGU2012-6477
S. Baraka and L. Jaffel
 Particle-In-Cell PIC 3D and MHD simulations of the Earth's Bow show.
- XY684 EGU2012-7067
X. Cao, Z. Y. Pu, and A. M. Du
 On the retreat of Near-Earth neutral line during substorm expansion phase: a THEMIS case study during the 2008 January 9 substorm
- XY685 EGU2012-7244
M. H. Hong, Y. Lin, and X. Y. Wang
 Generation of kinetic Alfvén waves by beam-plasma interaction in non-uniform plasma

- XY686 EGU2012-7543
S. E. Milan, M. Lester, R. Nakamura, K. Kauristie, M. Palmroth, H. Opgenoorth, and V. Sergeev
ECLAT: The European Cluster Assimilation Technology Project
- XY687 EGU2012-7747
R. C. Fear and S. E. Milan
High latitude observations of magnetotail plasma-sheet plasma in conjunction with a transpolar arc
- XY688 EGU2012-9175
K. Jelinek, Z. Nemecek, and J. Safrankova
Spatial profiles of magnetosheath plasma and magnetic field parameters and their variations
- XY689 EGU2012-10821
C. Norgren, A. Vaivads, Y. V. Khotyaintsev, and **M. André**
Cross spacecraft measurements of the lower hybrid drift waves and electron holes
- XY690 EGU2012-10848
R. Kovrazhkin and **J.-A. Sauvaud**
Evolution of ion beams in the low-altitude plasma sheet boundary layer
- XY691 EGU2012-11038
I. I. Vogiatzis, O. E. Malandraki, Q.-G. Zong, X.-Z. Zhou, T. E. Sarris, E. T. Sarris, H. Zhang, and T. A. Fritz
How important are earthward moving flux ropes for understanding substorm initiation and associated particle energization?
- XY692 EGU2012-11520
O. Roberts and X Li
Preliminary results from several k-filtering studies in the solar wind.
- XY693 EGU2012-11761
C.-P. Escoubet and the Cluster cusp Team
IMF-Bz Southward ion dispersions observed by Cluster in the polar cusp
- XY694 EGU2012-12462
E.I. Tanskanen, K. Snekvik, K.E.J. Huttunen, J.A. Slavin, and P. Peitso
Magnetospheric response to interplanetary magnetic field and velocity fluctuations
- XY695 EGU2012-12753
L. Palin, C. Jacquy, J.-A. Sauvaud, B. Lavraud, E. Budnik, V. Angelopoulos, U. Auster, J.P. McFadden, and D. Larson
Statistical analysis of dipolarizations using spacecraft closely separated along Z in the near-Earth magnetotail.
- XY696 EGU2012-12820
M. Cartwright, T. Phan, and V. Angelopoulos
Extended magnetic reconnection X-lines at small field shear angles (or large guide field) in the solar wind
- XY697 EGU2012-13571
M. F. Marcucci, L. Trenchi, M. B. Bavassano Cattaneo, H. Reme, C. M. Carr, and J. B. Cao
Kinetic and fluid signatures consistency during dayside reconnection observed by Double Star TC1
- XY698 EGU2012-447
R. Duthie, A. Fazakerley, C. Forsyth, A. Walsh, I. Dandouras, E. Lucek, and T. Zhang
Does High-Speed Plasma Sheet Flux Transport Contribute to Inner Magnetosphere Dipolarisation? : A Multi Year, Multi-Mission, Multi-Spacecraft, Multi-Instrument Statistical Study

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

Convener: E. Tanskanen | Co-Conveners: R. Nakamura, C. Jackman, S. Imber

Room: 32

Chairperson: n.n.

- 08:30–08:45 EGU2012-7508
S.V. Badman, C.M. Jackman, J.T. Clarke, and J.D. Nichols
Open flux in Saturn's magnetosphere
- 08:45–09:00 EGU2012-3817
J. A. Slavin, S. M. Imber, G. A. DiBraccio, T. Sundberg, S. A. Boardsen, B. J. Anderson, H. Korth, D. N. Baker, R. L. McNutt, and S. C. Solomon
MESSENGER Observations of Magnetotail Dynamics at Mercury
- 09:00–09:15 EGU2012-3985
T. L. Zhang and W. Baumjohann
Venus Express Magnetic Observations of the Venus Magnetotail
- 09:15–09:30 EGU2012-7372
A.A. Petrukovich, A.V. Artemyev, L.M. Zelenyi, H.V. Malova, and R. Nakamura
Embedded current sheet in the Earth's magnetotail
- 09:30–09:45 EGU2012-3630
Z. Vörös
Motions of the Earth's magnetotail at the distance of the Moon: multi-spacecraft observations

- 09:45–10:00 EGU2012-7449
T. I. Pulkkinen, M. Palmroth, R. L. McPherron, and J. Kissinger
 Solar wind - magnetosphere coupling during steady convection events

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

Convener: J. Laštovička | Co-Conveners: B. Zolesi

Room: 2

Chairperson: B. Zolesi

- 10:30–10:45 EGU2012-86
B. Nanan, J. Y. Liu, and H. Luhr
 New aspects of thermospheric and ionospheric responses to high latitude forcing revealed by satellite observations
- 10:45–11:00 EGU2012-2455
 M. Hapgood, **A. Belehaki**, B. Zolesi and the ESPAS Team
 ESPAS, the near-Earth space data infrastructure for e-Science: design and development phase
- 11:00–11:15 EGU2012-7753
C. Stolle, V. Truhlik, P. Richards, N. Olsen, and H. Lühr
 Low latitude electron temperature observed by the CHAMP satellite
- 11:15–11:30 EGU2012-11227
E.S. Andreeva, V.E. Kunitsyn, E.D. Tereshchenko, B.Yu. Krysanov, and M.O. Nazarenko
 Radiotomographic observations of corpuscular ionization in the ionosphere
- 11:30–11:45 EGU2012-13511
L.-C. Tsai, G. H. Chen, M. H. Tian, and Y. Zhang
 Use of the Hualien, Taiwan, dynasonde for surveillance of HF environmental radio and positioning of transmitting stations
- 11:45–12:00 EGU2012-1503
J. Laštovička, P. Koucká Knížová, and D. Kouba
 Are historical values of ionospheric parameters from ionosondes overestimated?

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

Convener: J. Laštovička | Co-Conveners: B. Zolesi

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: J. Laštovička

- XY699 EGU2012-3403
W.-H. Yeh, C.-Y. Huang, T.-Y. Hsiao, T.-C. Chiu, and Y.-A. Liou
 Detection of lower ionosphere by using signal to noise ratio data of radio occultation technique
- XY700 EGU2012-333
S Toledo-Redondo, M Parrot, A Salinas, J. Portí, J. Fornieles, and J. A. Morente
 Remote sensing of the Earth-ionosphere waveguide properties based on cut-off frequency detection from DEMETER satellite measurements
- XY701 EGU2012-10079
F. Lefeuvre, J.L. Pincon, and M. Parrot
 Estimating the incidence of K-filtering processes in the transionospheric propagation of VLF and MF waves
- XY702 EGU2012-5010
G Chisham
 A reassessment of SuperDARN meteor echoes from the upper mesosphere and lower thermosphere
- XY703 EGU2012-10934
E. Belova, S. Kirkwood, and T. Sergienko
 Spectral characteristics of polar mesosphere winter echoes measured with the EISCAT VHF and ESRAD MST radars
- XY704 EGU2012-5634
 E. Doornbos, **S. Bruinsma**, G. Koppenwallner, B. Fritsche, J. van den IJssel, P. Visser, J. de Teixeira da Encarnacao, and M. Kern
 Thermospheric density and wind from GOCE thruster activation and accelerometer data
- XY705 EGU2012-4023
K.G. Ratovsky, A.V. Oinats, and Yu.V. Yasukevich
 Empirical modeling of 27-day variations of local and global ionospheric parameters
- XY706 EGU2012-580
C. M. N. Candido, I. S. Batista, E. R. de Paula, F. Becker-Guedes, E. Shume, and J. H. A. Sobral
 Midnight/Post-Midnight F-region ionospheric irregularities observed over Sao Luis, Brazil

- XY707 EGU2012-9683
T. Onishi, C.-T. Nguyen, and J.-J. Berthelier
 Plasma bubble detection in the DEMETER micro-satellite data
- XY708 EGU2012-5186
T. Farges, E. Blanc, and E. Strand
 Unknown radio emission at about 3 MHz recorded in Norway
- XY709 EGU2012-12098
B.G Hauge and S. Montebugnoli
 Different states of the transient luminous phenomena in Hessdalen valley, Norway.
- XY710 EGU2012-5967
J. Zlotnicki, P. Yvetot, and F. Fauquet
 Existence of electric/magnetic signals related to unknown luminous lights observed in Hessdalen valley (Norway)?

ST3.2 – Ionospheric response to forcing from above and below – Orals

Convener: Dr. Buresova | Co-Conveners: O. Amm, D. Pancheva

Room: 2

Chairperson: D. Buresova

- 13:30–13:45 EGU2012-4000
T. Iyemori, K. Nakanishi, H. Lühr, and M. Matsumura
 Magnetic variations caused by the acoustic and internal gravity waves observed on ground and by the CHAMP satellite
- 13:45–14:00 EGU2012-8774
A. Aikio, L. Cai, T. Nygren, and R. Kuula
 Energy exchange rates between the ionosphere-thermosphere system and the magnetosphere at high latitudes
- 14:00–14:15 EGU2012-12828
B. W. Reinisch, X. Huang, I. Galkin, and D. Bilitza
 A Real-Time Assimilative Model for IRI
- 14:15–14:30 EGU2012-6862
M. Shepherd, G. Shepherd, and Y.-M. Cho
 Longitudinal Variability of Thermospheric Temperature
- 14:30–14:45 EGU2012-12920
M. He, L. Liu, W. Wan, and Y. Wei
 Strong evidences for the coupling between the ionospheric wave-4 structures and atmospheric tides: empirical model with COSMIC data
- 14:45–15:00 EGU2012-10551
Q. Wu, J. Noto, and R. Kerr
 Inter-hemisphere comparison of mid-latitude ionosphere and thermosphere

ST3.2 – Ionospheric response to forcing from above and below – Posters

Convener: Dr. Buresova | Co-Conveners: O. Amm, D. Pancheva

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: D. Buresova

- XY711 EGU2012-122
L. Sidorova and S. Filippov
 Topside Ionosphere Plasma bubbles seen as He⁺ Density Depletions: Estimations and Comparisons
- XY712 EGU2012-2320
Yu.Ya. Ruzhin, V.D. Kuznetsov, V.I. Kovalev, G.F. Karabadjak, V.L. Frolov, Yu.A. Platinin, and M. Parrot
 The ability to activate the local substorm-like events by powerful HF SURA heater
- XY713 EGU2012-3405
V. M. Vasyliunas
 Mechanical origin of ionospheric neutral-wind-dynamo currents
- XY714 EGU2012-3807
J. Forbes and X. Zhang
 The Lunar Semidiurnal Tide in the Thermosphere
- XY715 EGU2012-5471
B. E. Prokhorov, M. Foerster, A. A. Namgaladze, M. Hayn, and M. Holschneider
 Modelling the high-latitude magnetosphere-ionosphere-thermosphere system for various solar wind/IMF conditions using the UAM model

- XY716 EGU2012-5473
A. Kozlovsky, T. Turunen, and T. Ulich
Observations of acoustic gravity waves in the auroral ionosphere
- XY717 EGU2012-5778
P. Ritter, H. Lühr, C. Stolle, and Ch. Xiong
Lunar signals in the variations of the daytime equatorial ionisation anomaly from CHAMP
- XY718 EGU2012-8136
K. Podolská, V. Truhlík, and L. Tříšková
Study of Correlations between Main Ionospheric Parameters by Stochastic Modeling
- XY719 EGU2012-8248
G. Thuillier, D. Bolsée, M. DeLand, S. M. L. Melo, W. Schmutz, and A. Shapiro
A New Solar Spectral Irradiance Reconstruction based on MGII and Neutral Monitoring Indices for Use in Climate Modelling
- XY720 EGU2012-8359
L. Bjoland, N. Østgaard, K. Oksavik, and K. Atakan
Ionospheric Signatures Associated with the 21 February 2008 Svalbard Earthquake
- XY721 EGU2012-9414
D. Buresova, J. Lastovicka, J. Boska, T. Sindelarova, and J. Chum
Ionospheric behaviour during storm recovery phase
- XY722 EGU2012-9618
T. Onishi and J.-J. Berthelier
Latitude variations of AGW wave-front orientation deduced from a comparison of MSTID observations by DEMETER and its simulation using the SAMI2 ionospheric model
- XY723 EGU2012-12359
L. Triskova, V. Truhlik, and K. Podolska
Analysis of the day to day correlation of mid-latitude foF2 and solar proxies

ST3.3 – Advance in ionospheric research by incoherent scatter radars, related radio methods and novel large observational systems – Posters

Convener: E. Turunen | Co-Conveners: Dr. Häggström, Y. Ogawa

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Esa Turunen

- XY724 EGU2012-630
L. Chernogor, I. Dornin, L. Emelyanov, **S. Kharytonova**, and M. Lyashenko
Ionospheric Storm Effects above Kharkov during the August 5-6, 2011
- XY725 EGU2012-3028
I. Mann, A. Pellinen-Wannberg, and A. Tjulin
Meteor studies applying incoherent scatter radar instruments
- XY726 EGU2012-9855
A. Tjulin, L.-G. Vanhainen, and I. Mann
General configuration and site specific surveys for the EISCAT_3D incoherent radar system

ST3.4 – Dynamical Processes in the High-Latitude Ionosphere – Orals

Convener: J. Moen | Co-Conveners: E. Turunen, K. Hosokawa

Room: 2

Chairperson: J. Moen

- 15:30–15:45 EGU2012-6333
K. Oksavik, J. I. Moen, and H. C. Carlson
Spatial fine-structure in the F-region polar ionosphere
- 15:45–16:00 EGU2012-6001
G. Lu, W. Li, J. Raeder, Y. Deng, F. Rich, D. Ober, Y. Zhang, L. Paxton, M. Ruohoniemi, M. Hairston, and P. Newell
Reversed two-cell convection in the northern and southern hemisphere during northward IMF
- 16:00–16:15 EGU2012-10399
A. Kullen, J. A. Cumnock, T. Karlsson, and L. G. Blomberg
Plasma Flow Along Transpolar Arcs
- 16:15–16:30 EGU2012-1375
T. Jayachandran, K. Hosokawa, K. Shiokawa, Y. Ostuka, C. Watson, S. Mushini, J. MacDougall, P. Prikryl, R. Chadwick, and T. Kelly
GPS Total Electron Content Variations Associated with Poleward Moving Sun Aligned Arcs

16:30–16:45 EGU2012-2568

T. Motoba, **K. Hosokawa**, A. Kadokura, and N. Sato
Magnetic conjugacy of northern and southern auroral beads

16:45–17:00 EGU2012-11658

B. Gustavsson, H. Dahlgren, B. Lanchester, and N. Ivchenko
On Filamentation and Anti-Filamentation of Auroral Arcs

Wednesday, 25 April

ST1.2 – Multi-Spacecraft Observations and Modelling of Coronal and Heliospheric Processes in the Rising Phase of Cycle 24 – Orals

Convener: A. Opitz | Co-Conveners: V. Bothmer, A.P. Rouillard

Room: 32

Chairperson: V. Bothmer

15:30–15:45 EGU2012-6812

A. Title

Connected Solar Events

15:45–16:00 EGU2012-3270

T. Torok, Z. Mikic, O. Panasenco, V.S. Titov, K.K. Reeves, M. Velli, J.A. Linker, and G. de Toma
Observations and simulations of the sympathetic eruptions on 2010 August 1

16:00–16:15 EGU2012-14429

D. Odstrcil, C. A. de Koning, H. Xie, C. Moestl, M. Temmer, L. Jian, A. P. Rouillard, J. A. Davies, C. J. Davis, and R. Harrison
The first STEREO multi-event: Numerical simulation of coronal mass ejections (CMEs) launched on August 1, 2010

16:15–16:30 EGU2012-7174

B. Bein, M. Temmer, A. Vourlidas, and A. Veronig
CME mass evolution derived from stereoscopic observations of STEREO/SECCHI instruments COR1 and COR2

16:30–16:45 EGU2012-10321

D. Lario, **E.C. Roelof**, and G.C. Ho
Multi-spacecraft observations of solar energetic particle events in the rising phase of solar cycle 24: Longitudinal and radial intensity gradients

16:45–17:00 EGU2012-2368

M. Palmroth, R. C. Fear, and I Honkonen
Magnetopause energy transfer dependence on the interplanetary magnetic field and the Earth's magnetic dipole axis orientation

ST1.2 – Multi-Spacecraft Observations and Modelling of Coronal and Heliospheric Processes in the Rising Phase of Cycle 24 – Posters

Convener: A. Opitz | Co-Conveners: V. Bothmer, A.P. Rouillard

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: V. Bothmer

XY674 EGU2012-11634

R.D. Bentley, J. Abourdarham, A. Csillaghy, M. Messerotti, P. Gallagher, K. Bocchialini, C. Jacquy, and M. Hapgood
HELIO - A Research Environment for Heliophysics

XY675 EGU2012-2120

J. Enzl, L. Prech, J. Safrankova, and Z. Nemecek
Multi-Spacecraft Observations of Magnetic Reconnection in ICME sheaths

XY676 EGU2012-11632

E. Bosman and V. Bothmer
3D Modeling of CMEs observed with STEREO

XY677 EGU2012-3162

C. Möstl and the August 2010 events Team
Impacts and geo-effects of multiple coronal mass ejections around 2010 August 1 in the inner heliosphere

XY678 EGU2012-9720

A. Guerrero, C. Cid, Y. Cerrato, E. Saiz, J. Palacios, and D. Seaton
Geoeffectiveness of two CMEs interacting with the same CH

XY679 EGU2012-12604

A. Opitz
Solar wind structures and their effects on the plasma environment of Earth and Mars

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

Convener: M. Taylor | Co-Conveners: C.-P. Escoubet, M. Dunlop

Room: 32

Chairperson: Philippe Escoubet

- 08:30–08:45 EGU2012-3254
J. Berchem, R. Richard, C. P. Escoubet, and F. Pitout
 Cusp signatures of ion entry and acceleration at the magnetospheric boundary: Large-scale modeling of Cluster observations
- 08:45–09:00 EGU2012-3571
V. A. Sergeev, A. V. Nikolaev, N. A. Tsyganenko, H. J. Singer, and V. Angelopoulos
 Substorm current system as viewed by simultaneous GOES, THEMIS and ground-based observations interpreted using new Substorm Current Wedge model.
- 09:00–09:15 EGU2012-4766
G. Marklund, S. Sadeghi, B. Li, J. A. Cumnock, Y. Zhang, O. Amm, H. Nilsson, A. Masson, T. Karlsson, P.-A. Lindqvist, A. Fazakerley, E. Lucek, and J. Pickett
 Cluster multi-point study of the acceleration potential pattern and electrodynamics of an auroral surge and its associated horn arc
- 09:15–09:30 EGU2012-2845
J. Soucek and C. P. Escoubet
 Global distribution of ion temperature and ULF wave activity in the magnetosheath from joint Cluster and THEMIS observations
- 09:30–09:45 EGU2012-9562
N. Cornilleau-Wehrlin, B. Grison, G. Belmont, L. Rezeau, G. Chanteur, P. Robert, and P. Canu
 Variability of ULF wave power at the magnetopause: a study at low latitude with Cluster data
- 09:45–10:00 EGU2012-7705
R. C. Fear, M. Palmroth, and S. E. Milan
 Seasonal and clock angle control of the location of flux transfer events signatures at the magnetopause

ST2.3 – Earth's inner magnetosphere coupling: Observational and modelling studies – Orals

Convener: F. Darrouzet | Co-Conveners: S. Grimald, V. Maget, F. El-Lemdani Mazouz

Room: 7

Chairperson: F. Darrouzet

- 13:30–13:45 EGU2012-9147
M. W. Liemohn, N. Y. Ganushkina, I. Daglis, I. Dandouras, Y. Ebihara, M. V. Kubyschkina, S. Milan, S. Ohtani, N. Ostgaard, F. Toffoletto, S. Zaharia, S. Dubyagin, R. Ilie, and D. De Zeeuw
 Resolving Current Systems in Geospace
- 13:45–14:00 EGU2012-2175
M. W. Dunlop, Q. -H. Zhang, H. Luhr, I. Dandouras, C. Shen, R. Holme, J. Cao, Y. Bogdanova, and J. Eastwood
 The distribution of the ring current: opportunities for the swarm mission.
- 14:00–14:15 EGU2012-4313
A. Sicard-Piet and D. Boscher
 Pitch angle and energy diffusion coefficients due to wave particle-interaction calculated using WAPI code and a new wave data base
- 14:15–14:30 EGU2012-13314
R. Ilie, R. Skoug, P. Valek, H. Funsten, and A. Glocer
 A global view of the magnetospheric composition
- 14:30–14:45 EGU2012-12401
P. C. Brandt, K. Keika, S.- Y. Hsieh, and E. Talaat
 Dynamical MI-Coupling of the Ring Current and Plasmasphere and its Impacts on the Inner Magnetosphere
- 14:45–15:00 EGU2012-323
A. Artemyev, O. Agapitov, H. Breuillard, V. Krasnoselskikh, and G. Rolland
 Electron pitch-angle diffusion in the radiation belts: effects of whistler waves oblique propagation.

ST2.3 – Earth's inner magnetosphere coupling: Observational and modelling studies – Posters

Convener: F. Darrouzet | Co-Conveners: S. Grimald, V. Maget, F. El-Lemdani Mazouz

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: F. El-Lemdani Mazouz

- XY680 EGU2012-353
M. Yamauchi, I. Dandouras, F. Mazouz, H. Reme, S. Grimald, J. Pickett, and H. Nilsson
 Warm trapped plasmaspheric plume at keV energy confined near the equator

- XY681 EGU2012-13181
R. J. Strangeway and J. Raeder
The Validity of the Frozen-in Condition for the Inner Magnetosphere
- XY682 EGU2012-8075
J. Amaya, A. Marchaudon, C. Peymirat, and P.-L. Blelly
A new coupled model of the ionosphere-magnetosphere interhemispheric dynamics
- XY683 EGU2012-3445
G. Toth, X. Meng, T. Gombosi, A. Gloer, and M. Fok
Coupled anisotropic global MHD and pitch angle resolved inner magnetosphere models
- XY684 EGU2012-4121
S. Grimald, I. Dandouras, P. Robert, and E. Lucek
Study of the applicability of the curlometer technique with the four Cluster spacecraft in regions close to Earth
- XY685 EGU2012-4942
L. B. N. Clausen, K.-H. Glassmeier, J. W. Bonnell, and V. Angelopoulos
Waves and instabilities near the plasmopause
- XY686 EGU2012-5148
O. Agapitov, V. Krasnoselskikh, Y. Khotyaintsev, A. Artemyev, H. Breuillard, and G. Rollans
Whistler-mode Chorus Waves observed on the Cluster spacecraft in the Earth radiation belts
- XY687 EGU2012-6105
H. Breuillard, Y. Zaliznyak, O. Agapitov, V. Krasnoselskikh, A. Artemyev, and G. Rolland
Spatial spreading of magnetospherically reflected chorus wave packets
- XY688 EGU2012-2735
Z. Hrbackova, O. Santolik, F. Nemec, and N. Cornilleau-Wehrin
Occurrence rate of magnetosonic equatorial noise emissions as a function of the McIlwain's parameter
- XY689 EGU2012-3038
O. Santolik, E. Macusova, I. Kolmasova, D. A. Gurnett, J. S. Pickett, and N. Cornilleau-Wehrin
Source region of the dayside whistler-mode chorus
- XY690 EGU2012-9826
H. Laakso, R. Horne, O. Santolik, C.P. Escoubet, A. Masson, and M Taylor
Characteristics of the plasmaspheric hiss in the inner magnetosphere
- XY691 EGU2012-11724
R. Rankin, A. Degeling, and Q. -G. Zong
Shock Induced Drift-bounce Interaction with Magnetospheric ULF Waves
- XY692 EGU2012-5617
F. El-Lemdani Mazouz, P.M.E Décréau, J.L Rauch, S. Grimald, X. Vallières, S. Kouglbléno, J.G Trotignon, P. Canu, and F. darrouzet
Cluster survey of narrow band electrostatic emissions in the plasmasphere region.
- XY693 EGU2012-12627
G. Lointier, **F. Darrouzet**, P. M. E. Décréau, P. Canu, X. Vallières, S. Kouglbléno, J. G. Trotignon, and J. L. Rauch
Electron density in the refilling plasmasphere, as observed at Cluster orbit
- XY694 EGU2012-8956
F. Darrouzet, V. Pierrard, J. Cabrera, K. Borremans, G. Lointier, N. Ganushkina, and J. De Keyser
Links between the plasmopause and the radiation belt boundaries from Cluster measurements
- XY695 EGU2012-6520
J. A. Sauvaud and D. Boscher
Radiation Belt Low-Energy Electron Injections at low L-shells and Electron Lifetime During Weak Storms Around Solar Minimum
- XY696 EGU2012-9014
I. A. Daglis, S. Bourdarie, Y. Khotyaintsev, O. Santolik, R. Horne, I. Mann, D. Turner and the MAARBLE Team
Monitoring, Analyzing and Assessing Radiation Belt Loss and Energization
- XY697 EGU2012-4349
A. Sicard-Piet, V. Maget, D. Boscher, and S. Lejosne
Characterizing statistically the near Earth plasmasheet using NPOES and THEMIS data to improve radiation belts modelling
- XY698 EGU2012-1384
D. L. Turner, V. Angelopoulos, Y. Shprits, P. Cruce, and D. Larson
First results of phase space density radial distributions through the outer radiation belt using THEMIS-SST
- XY699 EGU2012-5192
A. Artemyev, O. Agapitov, H. Breuillard, V. Krasnoselskikh, and G. Rolland
Distribution of the electron pitch-angle diffusion rates in the radiation belts
- XY700 EGU2012-6350
K. Orlova, **Y. Shprits**, and B. Ni
Dependence of the bounce-averaged diffusion coefficients on magnetic field model in the outer radiation belt

- XY701 EGU2012-12468
A. Kellerman and **Y. Shprits**
Solar wind and geomagnetic activity effects on the radiation belt particle population using over a solar cycle of satellite and riometer data
- XY702 EGU2012-6611
Y. Shprits, M Daae, B Ni, D Kondarashov, and M Ghil
Influence of solar wind and plasmasphere on radiation belts fluxes

ST3.3 – Advance in ionospheric research by incoherent scatter radars, related radio methods and novel large observational systems – Orals

Convener: E. Turunen | Co-Conveners: Dr. Häggström, Y. Ogawa

Room: 2

Chairperson: Esa Turunen

- 10:30–10:45 EGU2012-623
L. Chernogor, I. Dornin, **S. Panasenko**, and V. Uryadov
Travelling Ionospheric Disturbances Generated by High Power HF SURA Facility: the Results from Kharkiv Incoherent Scatter Radar
- 10:45–11:00 EGU2012-4330
N. M. Schlatter, B. C. Goodbody, T. Grydeland, N. Ivchenko, B. Gustavsson, V. Belyey, and B. S. Lanchester
Aperture Synthesis Imaging at the EISCAT Svalbard radar
- 11:00–11:15 EGU2012-8609
A. Aikio, T. Nygren, R. Kuula, and M. Voiculescu
Neutral wind and electric field calculation from monostatic IS radar measurements by means of stochastic inversion
- 11:15–11:30 EGU2012-10631
Q. Wu and I. Haggstrom
Comparison of HIWIND and EISCAT derived Daytime Thermospheric Winds
- 11:30–11:45 EGU2012-11740
B. Gustavsson, I. Häggström, and A. Senior
Electron line Incoherent Scatter Spectrum VHF radar Observations and modeling.
- 11:45–12:00 EGU2012-13506
C. La Hoz, E. Turunen, and I. Häggström
Highlights of recent EISCAT research and implications to the EISCAT_3D science case

ST4.1/PS5.6 – Theory and simulations of solar system plasmas (co-organized) – Orals

Convener: M. Leubner | Co-Conveners: G. Belmont, J. Büchner

Room: 2

Chairperson: Gerard Belmont

- 08:30–08:45 EGU2012-2168
B.K. Shivamoggi
Spatial Intermittency in Electron Magnetohydrodynamic Turbulence
- 08:45–09:00 EGU2012-3120
N. W. Watkins, S. C. Chapman, and B. Hnat
Extremes and bursts in complex multi-scale plasmas
- 09:00–09:15 EGU2012-5653
R. Samtaney, N. F. Loureiro, D. A. Uzdensky, and A. A. Schekochihin
Plasmoid dynamics in 3D resistive MHD simulations of magnetic reconnection
- 09:15–09:30 EGU2012-9390
L. Matteini, S. Landi, M. Velli, and W.H. Matthaeus
Proton temperature anisotropy and current sheet stability: 2-D hybrid simulations
- 09:30–09:45 EGU2012-7327
G. Zimbardo and S. Perri
Superdiffusive propagation in space plasmas: numerical simulations and experimental evidences
- 09:45–10:00 EGU2012-3245
G. G. Howes, J. M. TenBerge, W. Dorland, E. Quataert, A. A. Schekochihin, T. Tatsuno, and R. Numata
Highlights from Gyrokinetic Simulations of Solar Wind Turbulence

ST4.1/PS5.6 – Theory and simulations of solar system plasmas (co-organized) – Posters

Convener: M. Leubner | Co-Conveners: G. Belmont, J. Büchner

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Gaetano Zimbardo

- XY703 EGU2012-9738
T.V. Laitinen, R. Jarvinen, E. Kallio, and P. Janhunen
Time-varying boundary conditions for reconnection in a hybrid simulation
- XY704 EGU2012-8642
A.S. Lipatov, J.F. Cooper, E.C. Sittler Jr., R.E. Hartle, and M. Sarantos
Effects of pickup ions on the lunar plasma environment: 3D hybrid modeling
- XY705 EGU2012-8044
D. Cai, B. Lembege, A. Esmaeili, and K.-I. Nishikawa
Dynamics of the cusp boundaries and particle entry during a Northward IMF period: 3-D PIC large scale simulation
- XY706 EGU2012-4717
E.V. Panov, A.V. Artemyev, R. Nakamura, and W. Baumjohann
Two types of tangential magnetopause current sheets: Cluster observations and theory
- XY707 EGU2012-3592
T. Passot, P.L. Sulem, and D. Laveder
Rogue waves in Alfvénic turbulence
- XY708 EGU2012-3557
M. Zhou, X.H. Deng, and S.Y. Huang
Electric field structure inside the secondary island in reconnection diffusion region
- XY709 EGU2012-1856
I. Richtero, Z. Nemecek, M. Beranek, J. Pavlu, and J. Safrankova
Model of Secondary Electron Emission from Small Dust Grains - Shape Influence
- XY710 EGU2012-13293
A. Verdini, **R. Grappin**, and M. Velli
On the origin of the $1/f$ spectrum in the heliosphere
- XY711 EGU2012-8933
S. von Alfthan, I. Honkonen, A. Sandroos, and M. Palmrooth
Optimizing performance of Vlasov simulations using sparse velocity grids
- XY712 EGU2012-6791
I. Shinohara, H. Kojima, T. Nagai, and M. Fujimoto
Wave activity around the X-line observed in the near Earth magnetotail
- XY713 EGU2012-2365
R. Smets, **G. Belmont**, and N. Aunai
Plasma diffusion in self-consistent fluctuations
- XY714 EGU2012-1814
V. D. Kuznetsov and N.S. Dzhililov
MHD Waves and Instabilities of a Temperature-Anisotropic Plasma in the Solar Corona As a Source of Its Heating
- XY715 EGU2012-1623
E. J. Koen, A. B. Collier, and S. K. Maharaj
A simulation approach of high-frequency electrostatic waves found in Saturn's magnetosphere
- XY716 EGU2012-3024
S. C. Chapman, G. Gogoberidze, B. Hnat, W. -C. Mueller, and A. J. Turner
The solar wind as a turbulence laboratory- some new quantitative points of contact between theory, simulation and solar wind observations
- XY717 EGU2012-3856
R. Grappin and A. Verdini
Shell-Reduced MHD: weak and strong turbulence
- XY718 EGU2012-1478
H.-J. Fahr and M. Siewert
Pick-up ion energization in the outer heliosphere due to bulk velocity fluctuations
- XY719 EGU2012-6906
T.K.M. Nakamura, W. Daughton, H. Hasegawa, and I. Shinohara
Turbulence formation via the Kelvin-Helmholtz vortex in an asymmetric velocity shear layer: 2D PIC simulations
- XY720 EGU2012-3722
D. Tsiklauri
Particle acceleration by circularly and elliptically polarised dispersive Alfvén waves in a transversely inhomogeneous, 2.5D and 3D plasma in the inertial and kinetic regimes
- XY721 EGU2012-11979
S. Boldyrev
Analytic and numerical modeling of solar-wind turbulence

PS1.2/AS4.21/ST6.1 – Polarimetry as an invaluable tool to study the Solar System and beyond. (co-organized) –

Posters

Convener: M. Barthelemy | Co-Conveners: H. LAMY, C.L. Simon Wedlund, F. Snik, S. Bagnulo

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: F. Snik

- XY465 EGU2012-9215
M. Barthelemy, H. Lamy, J. Liliensten, and C. Simon-Wedlund
A spectropolarimeter to study the auroral polarisation spectrum.
- XY466 EGU2012-9300
J. Liliensten, M. Barthélémy, P.O. Amblard, J. Moen, H. Rothkaehl, C. Simon-Wedlund, and H. Lamy
Calibrated polarization parameters of the auroral red line in Hornsund
- XY467 EGU2012-7013
V. Bommier, J. Liliensten, M. Barthélémy, and C. Simon Wedlund
Theoretical value of the linear polarization of the Earth aurorae red line and possible diagnostics
- XY468 EGU2012-5567
S. Kochenova, C. Lerot, M. De Maziere, and V. Letocart
Importance of polarization for remote sensing of the Earth's atmosphere
- XY469 EGU2012-12974
F. Snik, S. Heikamp, J. de Boer, C. U. Keller, G. van Harten, J. M. Smit, J. H. H. Rietjens, O. Hasekamp, D. M. Stam, H. Volten, and iSPEX team
iSPEX: the creation of an aerosol sensor network of smartphone spectropolarimeters
- XY470 EGU2012-10571
T. Karalidi, D.M. Stam, F. Snik, C.U. Keller, W.B. Sparks, and S. Bagnulo
Observing the Earth as an exoplanet
- XY471 EGU2012-8103
H. Lamy, S. Ranvier, M. Anciaux, S. Calders, J. De Keyser, and E. Gamby
Radio polarisation measurements of meteor trail echoes with BRAMS
- XY472 EGU2012-8670
L. J. Einarsen, M. Rodenhuis., F. Snik, C. U. Keller, D. M. Stam, R. J. de Kok, M. Bianda, and R. Ramelli
Multiwavelength imaging polarimetry of Venus at various phase angles
- XY473 EGU2012-12843
A. C. Lvasseur-Regourd, S. Bagnulo, I. Belskaya, J. Berthier, S. Fornasier, E. Hadamcik, J.-B. Renard, and G.-P. Tozzi
Polarization as a tool to study dust in small solar system bodies, in the context of future space missions
- XY474 EGU2012-8486
D. Guirado, D.M. Stam, and M. Smit
A Monte Carlo model for the reflection of polarized light on surfaces
- XY475 EGU2012-10778
E. Hadamcik, A.C. Lvasseur-Regourd, J.-B. Renard, and J. Lasue
Observations and experimental simulations of cometary and interplanetary dust by imaging polarimetry
- XY476 EGU2012-12499
A. Virkki, K. Muinonen, and A. Penttilä
Circular-polarization ratios for aggregates of spherical particles
- XY477 EGU2012-1049
A. Cellino, R. Gil-Hutton, Ph. Bendjoya, A. Dell'Oro, M. Canada-Assandri, and M. Di Martino
Towards a new Calibration of the Polarization-Albedo Relation for the Asteroids.
- XY478 EGU2012-11671
G. P. Tozzi, S. Bagnulo, H. Boehnhardt, and L. Kolokolova
Polarimetry of Comet 9P/Tempel 1 around the epoch of the Deep Impact Event
- XY479 EGU2012-2002
I. Kulyk
Brightness and polarization opposition effects exhibited by Tethys, Dione, and Rhea at low phase angles
- XY480 EGU2012-5868
A. Stinson, I. Belskaya, S. Bagnulo, G.P. Tozzi, K. Muinonen, A. Barucci, and S. Fornasier
Polarimetry of the dwarf planet (136472) Makemake
- XY481 EGU2012-8343
J. Freimanis
Polarized radiative transfer equation in several astrophysically interesting coordinate systems
- XY482 EGU2012-13379
M. Faurobert and **I. Milic**
Hanle effect in C2 lines of the Solar spectrum: an inversion procedure for weak magnetic field measurement

CL2.8/AS1.13/ST6.5 – Impact of solar and geomagnetic variabilities on the Earth's lower,middle and upper atmospheres (co-organized) – Orals

Convener: F.-J. Lübken | Co-Conveners: J. Liliensten, T. Dudok de Wit, M. Kaufmann, P. Preusse

Room: 15

Chairperson: Jean Liliensten

- 10:30–11:00 EGU2012-7630
N.A. Krivova, W. Ball, Y.C. Unruh, and S.K. Solanki
Solar Spectral Irradiance Variations
- 11:00–11:15 EGU2012-1520
T. Woods
Solar Irradiance Variability: Comparisons of Observations over Solar Cycles 21-24
- 11:15–11:30 EGU2012-1920
S. C. Solomon and **L. Qian**
The Interaction of Solar and Geomagnetic Activity with Climate Change in the Thermosphere
- 11:30–11:45 EGU2012-2344
M. Fedrizzi and **S.L. Bruinsma**
Modeling Space Weather in the thermosphere
- 11:45–12:00 EGU2012-8702
M. Rapp, R. Latteck, P. Hoffmann, M. Zecha, G. Stober, T. Renkowitz, and W. Singer
Mid-mesospheric radar echoes: recent observations with a novel MST-radar and implications for the scattering mechanism

LUNCH BREAK

Chairperson: Jean Liliensten

- 13:30–13:45 EGU2012-8267
A. Seppälä
Particle precipitation impacts on the atmosphere
- 13:45–14:15 EGU2012-7098
P. T. Verronen, M.E. Andersson, C.J. Rodger, M.A. Clilverd, S. Wang, and B.R. Carson
Precipitating Radiation Belt Electrons and Mesospheric Odd Hydrogen
- 14:15–14:30 EGU2012-7368
M. Sinnhuber, N. Wieters, and H. Winkler
Energetic particle precipitation into the middle atmosphere: measurements and model predictions
- 14:30–15:00 EGU2012-2828
F.-J. Lübken
Highlights of the CAWSES programme in Germany
- Chairperson: Franz-Josef Luebken
- 15:30–16:00 EGU2012-11335
C. von Savigny, C. Robert, N. Rahpoe, H. Winkler, E. Becker, H. Bovensmann, M. T. DeLand, and J. P. Burrows
On the impact of short-term solar variability on the polar summer mesopause and noctilucent clouds
- 16:00–16:15 EGU2012-2860
U. Cubasch, U. Langematz, A. Kubin, C. Brühl, T. Spanghel, and A. Baumgärtner
Solar Effects on Chemistry and Climate Including Ocean Interactions
- 16:15–16:30 EGU2012-12600
J.G. Anet, **E. Rozanov**, and T. Peter
FUPSOL: Modelling the Future and Past Solar Influence on Earth Climate
- 16:30–16:45 EGU2012-10845
A. Kubin, J. Abalichin, B. Ayarzagüena, U. Langematz, and P. Jöckel
A model study on the downward propagation of the 11-year solar signal in a warming climate
- 16:45–17:00 EGU2012-8757
S. Ineson, A. A. Scaife, J. R. Knight, J. C. Manners, N. J. Dunstone, L. J. Gray, and J. D. Haigh
Solar forcing of winter climate variability in the northern hemisphere

CL2.8/AS1.13/ST6.5 – Impact of solar and geomagnetic variabilities on the Earth's lower,middle and upper atmospheres (co-organized) – Posters

Convener: F.-J. Lübken | Co-Conveners: J. Liliensten, T. Dudok de Wit, M. Kaufmann, P. Preusse

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Franz-Josef Luebken

- Z1 EGU2012-2905
F.-J. Lübken and U. Berger
Temperature and ice layer trends in the summer middle atmosphere
- Z2 EGU2012-3030
H. Lühr and K. Häusler
Dependence of the thermospheric density on solar and magnetic activity
- Z3 EGU2012-3781
P. Stauning
Solar activity - climate relations: A critical review.
- Z4 EGU2012-3859
M. Smith and **A. J. McDonald**
Using finite-time Lyapunov exponents to investigate the effect of stratospheric sudden warmings on the polar vortices
- Z5 EGU2012-3873
A. J. McDonald
Inter-hemispheric variations in stratopause structure
- Z6 EGU2012-4267
L. Sfica and M. Voiculescu
Interplay between effects of solar forcing and internal climatic factors on tropospheric and stratospheric temperature anomalies in the Northern Hemisphere
- Z7 EGU2012-4960
J. Hildebrand, G. Baumgarten, J. Fiedler, and F.-J. Lübken
Simultaneous wind and temperature measurements with a twin Doppler lidar in Northern Norway
- Z8 EGU2012-5303
M. Kaufmann, H. Schmidt, C. Lehmann, M. Ern, and M. Riese
The evolution of atomic hydrogen between 2002 and 2008
- Z9 EGU2012-5427
J. Höffner, R.J. Morris, B. Kaifler, T. Viehl, and F.-J. Lübken
First results of combined Fe-lidar/Radar measurements at Davis, 69° S.
- Z10 EGU2012-5445
D.A. Newnham, P.J. Espy, M.A. Clilverd, C.J. Rodger, A. Seppälä, D.J. Maxfield, P. Hartogh, K. Holmén, and R.B. Horne
Observations of nitric oxide in the Antarctic middle atmosphere during recurrent geomagnetic storms
- Z11 EGU2012-5513
J. O'Regan, J.-P. Muller, and S. Matthews
Towards understanding the nature of any relationship between Solar Activity and Cosmic Rays with thunderstorm activity and lightning discharge
- Z12 EGU2012-5726
S. Dewitte, S. Mekaoui, A. Chevalier, C. Conscience, E. Janssen, M. Van Ruymbeke, Z. Phing, J.-P. Noel, M. Meftah, and G. Thuillier
Science results from the Sova-Picard Total Solar Irradiance instrument
- Z13 EGU2012-6059
M. Kopp, M. Gerding, J. Höffner, and F.-J. Lübken
Tidal signatures in temperature data derived by lidars in the mid-latitude middle atmosphere
- Z14 EGU2012-6453
C. Delaney, S. G. Jennings, and A. Ó Rodaighe
Polar Mesospheric Cloud Occurrence from Geostationary Satellite Observations in the Northern Hemisphere for the Period 2001 to 2005
- Z15 EGU2012-6797
V. R. Narukull, T. Tsuda, D.M. Riggan, and S. Gurubaran
Long-term variability of mean winds in the mesosphere and lower thermosphere within $\pm 22^\circ$
- Z16 EGU2012-6852
J. Grahn and A. J. McDonald
Testing metrics of mixing using a chaotic advection model
- Z17 EGU2012-6998
L. Hejkrlik
Spectral analysis of luni-solar signal in daily meteorological data at Prague-Klementinum 1775 to 2011
- Z18 EGU2012-7643
P. Francia and M. Vellante
Long term changes in the plasmaspheric density through measurements of the ULF resonance frequency at low latitude

- Z19 EGU2012-7645
S. Versick, B. Funke, A. Gardini, G. Stiller, T. von Clarmann, and O. Kirner
Comparison of EMAC model results to satellite observations in the winter 2008/09 within the HEPPA-II intercomparison
- Z20 EGU2012-7767
A.L. Morozova and M.A. Pais
Different forcings and their effect on temperature variations in Portugal: volcanic eruptions, anthropogenic aerosols, atmospheric circulation and solar activity
- Z21 EGU2012-7887
V. Dobrica, C. Suteanu, and C. Demetrescu
Solar/geomagnetic signature in climate parameters. A comparative analysis of temperature evolution in Atlantic Canada and Central-Eastern Europe
- Z22 EGU2012-8254
G. Cessateur, A.I. Shapiro, M. Dominique, M. Kretzschmar, N. Krivova, A.V. Shapiro, W. Schmutz, M. Schoell, S. Solanki, R. Tagirov, G. Thuillier, C. Wehrli, and K.L. Yeo
Solar Spectral Irradiance as observed by LYRA/PROBA2 and PREMOS/PICARD
- Z23 EGU2012-8271
J. O. Pepke Pedersen
Ion-induced nucleation of the sulfuric acid - water system
- Z24 EGU2012-8338
S. Kowalewski, M. Palm, and J. Notholt
The Mesospheric OH* layer above Spitsbergen: Investigation of polar mesospheric dynamics and temperature trends by means of ground based OH* airglow measurements and model studies
- Z25 EGU2012-8347
M. Palus and D. Novotna
Phase coherence between solar/geomagnetic activity and climate variability from the stratosphere to the troposphere and the North Atlantic Oscillation
- Z26 EGU2012-8701
S. Kalisch, P. Preusse, M. Ern, S. D. Eckermann, and M. Riese
Gravity wave - planetary wave interaction simulated by gravity wave ray-tracing
- Z27 EGU2012-8881
N. Bergeot, I. Tsagouri, C. Bruyninx, J. Legrand, J.-M. Chevalier, P. Defraigne, Q. Baire, and E. Pottiaux
Effect of Space Weather on Ionospheric Total Electron Content Variation during the 23rd Solar Cycle.
- Z28 EGU2012-9292
L.E.A. Vieira, T. Dudok de Wit, and M. Kretzschmar
Modeling the evolution of the total and solar irradiance based on HMI/SDO magnetograms and solar surface magnetic flux transport models
- Z29 EGU2012-9589
T. Asikainen, V. Maliniemi, and K. Mursula
The corrected NOAA/POES energetic particle database for space climate studies
- Z30 EGU2012-10210
H. Lu, C. Franzke, M. Jarvis, and O. Martius
Possible Effect of Solar Wind on Rossby Wave Propagation and Breaking
- Z31 EGU2012-10255
V. Maliniemi, T. Asikainen, and K. Mursula
Correlation between surface temperature variations and energetic electron precipitation in northern hemisphere winter during the last three solar cycles
- Z32 EGU2012-10492
O. K. Kvissel, Y. J. Orsolini, and F. Stordal
Formation of stratospheric nitric acid by a hydrated ion cluster reaction: chemical and dynamical effects of energetic particle precipitation on the middle atmosphere
- Z33 EGU2012-10752
T. Reddmann, B. Funke, G. Stiller, S. Versick, J.M. Wissing, R. Ruhnke, W. Kouker, and A. Vlasov
The thermospheric NOx intrusion in Arctic winter 2008/2009
- Z34 EGU2012-10815
C. G. Hoffmann, D. E. Kinnison, R. R. Garcia, M. Palm, J. Notholt, U. Raffalski, and J. Groß
CO-based examination of the Arctic middle atmosphere dynamics in the Specified Dynamics version of the Whole Atmosphere Community Climate Model (SD-WACCM) using ground-based CO observations from Kiruna
- Z35 EGU2012-11122
I. Cnossen and **H. Lu**
The Vertical Connection of the QBO-Modulated 11-year Solar Cycle Signature during NH Early Winter
- Z36 EGU2012-11861
B. Strelnikov, A. Szewczyk, and M. Rapp
In-situ measurements of small-scale structures in neutrals and plasma species during ECOMA-2010

- Z37 EGU2012-12709
T. Demissie, M. Daae, N. Kleinknecht, and P. Espy
Planetary waves during a moderate geomagnetic storm
- Z38 EGU2012-2496
S. Misios and H. Schmidt
Model assessment of the response of the tropical lower stratosphere to the 11-yr solar cycle
- Z39 EGU2012-7239
G. Chiodo, D.R. Marsh, N. Calvo, and K. Matthes
The impact of volcanic events and ENSO on the detection of the solar cycle signal in the tropical lower stratosphere
- Z40 EGU2012-3330
K. Rypdal
Global temperature response to radiative forcing: solar cycle versus volcanic eruptions
- Z41 EGU2012-7456
M. Ern, P. Preusse, S. Kalisch, M. Kaufmann, and M. Riese
Global distribution of quasi two-day waves in the mesosphere and possible effects of gravity waves

Thursday, 26 April

ST5.1/NH1.10/PS5.5 – Space Weather and its Effects on Terrestrial and Geo-Space Environments: Science and Applications (co-organized) – Orals

Convener: V. Pierrard | Co-Conveners: H. Rothkaehl, N. Crosby, M. Menvielle

Room: 24

Chairperson: N. Crosby

- 13:30–13:45 EGU2012-5399
M. Grande
Planetary Space Weather
- 13:45–14:00 EGU2012-12301
O.E. Malandraki and the SEPServer consortium Team
Solar Energetic Particle Research within SEPServer - a Space Weather Perspective
- 14:00–14:15 EGU2012-5460
L. Barnard, M. Lockwood, M.J. Owens, C.J. Davis, M.A. Hapgood, and F. Steinhilber
Long term trends in solar energetic particle events
- 14:15–14:30 EGU2012-3783
P. Stauning
Relations of PC indices to further geophysical activity parameters.
- 14:30–14:45 EGU2012-9601
A. Janzhura and O. Troshichev
The PC index: method of calculation and physical sense
- 14:45–15:00 EGU2012-4111
C. Stolle and J. Matzka
PCN-index derivation at World Data Center for Geomagnetism, Copenhagen, DTU Space

PS1.2/AS4.21/ST6.1 – Polarimetry as an invaluable tool to study the Solar System and beyond. (co-organized) – Orals

Convener: M. Barthelemy | Co-Conveners: H. LAMY, C.L. Simon Wedlund, F. Snik, S. Bagnulo

Room: 28

Chairperson: Mathieu Barthelemy

- 15:30–15:45 EGU2012-14166
J.M. Smit, J.H.H. Rietjens, O. Hasekamp, D.M. Stam, F. Snik, G. van Harten, C.U. Keller, O. van der Togt, A.L. Verlaan, K. Moddemeijer, M. Beijersbergen, R. Voors, K. Wielinga, and B.-J. Vollmuller
SPEX2Earth, a novel spectropolarimeter for remote sensing of aerosols and clouds
- 15:45–16:00 EGU2012-12260
K. Muinonen, J. Tyynelä, and O. Wilkman
Theoretical interpretation of light scattered by the surfaces of atmosphereless Solar-System bodies
- 16:00–16:15 EGU2012-3171
L. Kolokolova, L. Nagdimunov, and W. Sparks
Combining Linear and Circular Polarization in Remote Sensing of Cosmic Dust and Planetary Aerosols
- 16:15–16:30 EGU2012-6273
M. Snow, G. Holsclaw, and W. McClintock
Disk-Integrated Polarization of the Moon in the Ultraviolet from SOLSTICE
- 16:30–16:45 EGU2012-2539
R. West
Polarisation measurements with Voyager and Cassini
- 16:45–17:00 EGU2012-5584
H.M. Schmid
Polarimetric investigation of extra-solar planets and planets in the solar system
- 17:00–17:15 EGU2012-12224
S. Bagnulo, M.F. Sterzik, and E. Palle
The Earth as a benchmark: spectro-polarimetry unveils strong bio-signatures

Friday, 27 April

ST1.1 – Open session on the Sun and heliosphere – Orals

Convener: V. Bothmer | Co-Conveners: Dr. Malandraki

Room: 26

Chairperson: Olga Malandraki

- 08:30–08:45 EGU2012-11008
L. Matteini, P. Hellinger, R. Wicks, B. Goldstein, S. Landi, M. Velli, and M. Neugebauer
Signatures of kinetic instabilities in the solar wind
- 08:45–09:00 EGU2012-9963
O. Alexandrova, C. Rossi, A. Mangeney, R. Grappin, and V. Carbone
Solar wind turbulence at kinetic scales
- 09:00–09:15 EGU2012-2879
P. Hellinger, L. Matteini, P. M. Travnicek, S. Stverak, and E. Marsch
Proton energetics in the solar wind between 0.3 and 1 AU: Helios reloaded
- 09:15–09:30 EGU2012-9383
O.V. Khabarova and V.N. Obridko
Experimental observations of the interplanetary magnetic field distribution in the inner heliosphere: controversial points
- 09:30–09:45 EGU2012-8853
G. Erdős and A. Balogh
Open magnetic flux in the heliosphere, as determined from spacecraft measurements over several solar cycles.
- 09:45–10:00 EGU2012-9415
K.-L. Klein and the SEPServer consortium Team
Solar energetic particle events, hard X-ray and radio emissions - the SEPServer project

COFFEE BREAK

Chairperson: Volker Bothmer

- 10:30–11:00 EGU2012-13894
A.J. Tylka, W.F. Dietrich, R.J. Murphy, C.K. Ng, G.H. Share, M.A. Shea, and D.F. Smart
Very High Energy Solar Protons in the Sun's Atmosphere and at Earth: Gamma Ray Flares and Ground Level Events
- 11:00–11:15 EGU2012-11384
R. D. C. Silva, **F. C. R. Fernandes**, and C. L. Selhorst
Investigation into solar type II radio bursts recorded by CALLISTO-BR
- 11:15–11:30 EGU2012-9899
O. Floyd, **P. Lamy**, and A. Llebaria
The interaction between coronal mass ejections and streamers as viewed by LASCO over 15 years
- 11:30–11:45 EGU2012-1677
M. Temmer, B. Vrsnak, T. Rollett, B. Bein, C.A. deKoning, Y. Liu, E. Bosman, J.A. Davies, C. Möstl, T. Zic, A.M. Veronig, V. Bothmer, R. Harrison, N. Nitta, M. Bisi, O. Flor, J. Eastwood, D. Odstrcil, and R. Forsyth
CME-CME interaction during the 2010 August 1 events
- 11:45–12:00 EGU2012-5216
L. Barnard, M. Lockwood, M. J. Owens, C. J. Davis, M. A. Hapgood, and F. Steinhilber
Predicting space climate change.

ST1.1 – Open session on the Sun and heliosphere – Posters

Convener: V. Bothmer | Co-Conveners: Dr. Malandraki

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: Volker Bothmer, Olga Malandraki

- XY639 EGU2012-97
M. Rockenbach, A. Dal Lago, W.D. Gonzalez, K. Munakata, C. Kato, T. Kuwabara, J. Bieber, N.J. Schuch, M.L. Duldig, J.E. Humble, H.K. Al Jassar, M.M. Sharma, and I. Sabbah
Cosmic ray particles behavior during last solar minimum

- XY640 EGU2012-1209
G. Steinitz, O. Piatibratova, P. Kotlarsky, P. Sturrock, and C. Maritn
Corroboration for the influence of a component of solar irradiance on subsurface radon signals
- XY641 EGU2012-1268
N. Gazit-Yaari (Charit-Yaari)
Influence of a component of solar irradiance on radon signals at 1000 meter depth at the Gran Sasso Laboratory, Italy
- XY642 EGU2012-2313
C. Martin, R.F. Wimmer-Schweingruber, S.R. Kulkarni, J. Grunau, V. de Manuel, C. Terasa, S. Burmeister, D. Sie, R. Paspigilis, and S. Boettcher
Development status of the Kiel units for the EPD instrument onboard Solar Orbiter
- XY643 EGU2012-2473
E.S. Vernova, M.I. Tyasto, and D.G. Baranov
N-S asymmetry of the photospheric magnetic field: relation with the positive and negative flux imbalance
- XY644 EGU2012-6381
C.J. Farrugia, B. Harris, **M. Leitner**, C. Möstl, A. B. Galvin, K. D. C. Simunac, R. B. Torbert, M.B. Temmer, A. M. Veronig, N. V. Erkaev, A. Szabo, K. W. Ogilvie, J. G. Luhmann, and V. A. Osherovich
Deep Solar Activity Minimum 2007-2009: Solar Wind Properties and Major Effects on the Terrestrial Magnetosphere
- XY645 EGU2012-6990
N.L. Borodkova and G.N. Zastenker
Observations of the sharp and large boundaries in the solar wind pressure with high time resolution by the BMSW instrument onboard the Spektr - R project.
- XY646 EGU2012-7939
O Malandraki, L. Tan, D. Reames, C. Ng, L Wang, and G Dorrian
Use of incident and reflected solar particle beams to trace the topology of magnetic clouds
- XY647 EGU2012-9001
O.E. Malandraki, E. Valtonen, N. Agueda, A. Papaioannou, K.-L. Klein, B. Heber, W. Droege, H. Aurass, A. Nindos, N. Vilmer, B. Sanahuja, A. Kouloumvakos, S. Braune, P. Preka-Papadema, K. Tziotziou, C. Hamadache, J. Kiener, V. Tatischeff, J. Kartavykh, and R. Vainio
Scientific analysis within SEPServer: the 13 July 2005 SEP event case study
- XY648 EGU2012-9858
C. Lacombe, **O. Alexandrova**, A. Mangeney, and M. Berthomier
Observations of whistler waves in solar wind with Cluster mission
- XY649 EGU2012-11300
F. C. R. Fernandes, R. D. C. Silva, Z. A. L. Sodr , J. E. R. Costa, and H. S. Sawant
Observations of solar radio emissions in meter wavelengths carried by CALLISTO-BR
- XY650 EGU2012-9480
K. Lukacs and G. Erdos
Statistical study of the occurrence rate of directional discontinuities in the heliosphere
- XY651 EGU2012-11675
F. C. R. Fernandes, M. J. A. Bolzan, R. R. Rosa, A. Prestes, J. R. Cecatto, and H. S. Sawant
Wavelet analysis of solar decimeter spikes
- XY652 EGU2012-11927
L. Trenchi, R. Bruno, R. D'Amicis, D. Telloni, and M. F. Marcucci
Observations of Solar energetic particles dropouts associated with interplanetary magnetic field modulations
- XY653 EGU2012-12641
P. Paolo Giovanni, C. Di Lorenzo, M. Pietrolungo, and R. Tozzi
Analysis of the 27-day cycle of the geomagnetic field during the past 50 years.
- XY654 EGU2012-13869
O. E. Malandraki, A. J. Tylka, C. K. Ng, R. G. Marsden, C. Tranquille, D. Patterson, T. P. Armstrong, L. J. Lanzerotti, and G. Dorrian
Energetic particle spectral and compositional invariance in the 3-D Heliosphere: Comparison between Ulysses and ACE/WIND in late 2001
- XY655 EGU2012-14043
A.J. Tylka, Y.K. Ko, O.E. Malandraki, G. Dorrian, R. G. Marsden, C. K. Ng, and C. Tranquille
Initial Fe/O Enhancements in Large, Gradual, Solar Energetic Particle Events: Observations from Widely-Separated Spacecraft, Wind and Ulysses
- XY656 EGU2012-7300
K. Andreeova, E. Kilpua, H. Koskinen, R. Vainio, and H. Hietala
Analysis of suprathermal electron depletions within magnetic cloud
- XY657 EGU2012-2361
M. Palmroth, I. Honkonen, Y Kempf, S von Alfthan, and A Sandroos
Magnetosheath dynamics and lobe reconnection as seen from a global beyond-MHD simulation Vlasiator

ST1.3 – Particle acceleration mechanisms in solar system plasmas: observations and theory – Orals

Convener: A. Retinò | Co-Conveners: H. Kucharek, Dr. Malandraki, S. Krucker

Room: 32

Chairperson: A. Retino

- 13:30–13:45 EGU2012-3226
K. Shibata
Fractal Reconnection and Particle Acceleration in the Solar Corona
- 13:45–14:00 EGU2012-1303
G. Mann, H. Aurass, H. \\\Onel, and A. Warmuth
On the role of slow mode shocks in the reconnection region for generating energetic electrons during solar flares
- 14:00–14:15 EGU2012-2986
R. Miteva, K.-L. Klein, S. W. Samwel, G. Trotter, and O. Malandraki
Solar energetic particle events and parent solar activity
- 14:15–14:30 EGU2012-7063
W. L. Teh, R. Nakamura, M. Fujimoto, and E. Kronberg
Observations of electron acceleration within reconnection ion diffusion region
- 14:30–14:45 EGU2012-4415
R. Potelette, M. Berthomier, and J. Pickett
Small scale particle acceleration processes in the auroral region: Remote sensing and "in situ" measurements
- 14:45–15:00 EGU2012-1369
A. Masters, S. J. Schwartz, E. M. Henley, M. F. Thomsen, B. Zieger, A. J. Coates, N. Achilleos, J. Mitchell, K. C. Hansen, and M. K. Dougherty
Electron heating at Saturn's bow shock

ST1.3 – Particle acceleration mechanisms in solar system plasmas: observations and theory – Posters

Convener: A. Retinò | Co-Conveners: H. Kucharek, Dr. Malandraki, S. Krucker

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: H. Kucharek

- XY658 EGU2012-744
I.V. Zimovets, I.N. Sharykin, and A.B. Struminsky
Analysis of the coronal electron acceleration region in an eruptive solar flare
- XY659 EGU2012-6438
M. Gordovskyy, P.K. Browning, E. Kontar, and N. Bian
Particle acceleration in twisted coronal loops: effect of collisions and magnetic convergence
- XY660 EGU2012-3675
G. Parks, M. McCarthy, E. Lee, I. Dandouras, H. Reme, and L. Kistler
Acceleration of Solar Wind by Parallel Electric Fields
- XY661 EGU2012-11219
H. Hietala, A. Sandroos, and R. Vainio
Particle acceleration in shock-shock interaction: model to data comparison
- XY662 EGU2012-7492
S. Perri and **G. Zimbardo**
Superdiffusive shock acceleration
- XY663 EGU2012-4124
P. Savoini, B. Lembege, and J. Stienlet
Origin of the different energetic ion populations in the quasi-perpendicular Ion Foreshock: 2D Full-particle simulation
- XY664 EGU2012-3984
Z. Yang, B. Lembege, and Q. Lu
Impact of the rippling of a 2D perpendicular shock front on ion acceleration mechanisms: PIC and test particles simulations
- XY665 EGU2012-12285
A. Kis, O. Agapitov, V. Krasnoselskikh, I. Dandouras, and E. A. Lucek
Ion acceleration by electro-magnetic plasma waves in the vicinity of SLAMS boundary observed in the front of the Earth's quasi-parallel bow shock
- XY666 EGU2012-5875
L. Muschietti and B. Lembege
Electron heating via microturbulence occurring in the front of supercritical quasiperpendicular shocks

- XY667 EGU2012-3466
I. Roth
Small Scale Reconnection : Structure and Electron Jet Emission
- XY668 EGU2012-6140
S. Y. Huang, A. Vaivads, M. Zhou, A. Retinò, Yu.V. Khotyaintsev, X. H. Deng, M. André, and H. S. Fu
Magnetic Islands in the reconnection diffusion region: Cluster observation
- XY669 EGU2012-2087
H. Fu, Y. Khotyaintsev, A. Vaivads, M. André, and S. Huang
Statistical study of dipolarization front at magnetotail: Fermi and betatron acceleration
- XY670 EGU2012-9235
B. Zieger, A. Retino, and R. Nakamura
Ion temperature anisotropy and related plasma instabilities in the near-Earth magnetotail
- XY671 EGU2012-6754
A. Retinò, A. Vaivads, B. Zieger, R. Nakamura, M. Fujimoto, S. Kasahara, S. Badman, A. Masters, A. Coates, and M. K. Dougherty
Energetic electron acceleration at reconnection jet fronts in planetary magnetotails
- XY672 EGU2012-4959
H. Gunell, I. Mann, J. De Keyser, and L. Andersson
Vlasov simulations of electron trapping on auroral field lines
- XY673 EGU2012-2853
M. Yamauchi, Y. Futaana, A. Fedorov, R.A. Frahm, E. Dubinin, R. Lundin, J.-A. Sauvaud, J.D. Winningham, S. Barabash, and H. Holmström
Ion Acceleration by Multiple Reflections at Martian Bow Shock

ST5.1/NH1.10/PS5.5 – Space Weather and its Effects on Terrestrial and Geo-Space Environments: Science and Applications (co-organized) – Orals

Convener: V. Pierrard | Co-Conveners: H. Rothkaehl, N. Crosby, M. Menvielle

Room: 26

Chairperson: n.n.

- 13:30–13:45 EGU2012-10238
A. Krankowski, R. Sieradzki, I.E. Zakharenkova, and I.V. Cherniak
GNSS monitoring of the ionosphere for Space Weather services
- 13:45–14:00 EGU2012-10458
A. Luque and F. J. Gordillo-Vázquez
Transient Luminous Events: optical emissions from high altitudes to probe the Earth's upper atmosphere
- 14:00–14:15 EGU2012-12927
D. Bilitza and L. McKinnell
International Reference Ionosphere - A tool for Space Weather Applications: Recent Developments
- 14:15–14:30 EGU2012-9067
G. Cessateur, J. Lilosten, T. Dudok de Wit, A. BenMoussa, and M. Kretzschmar
New observational strategies for reconstructing the solar UV flux for space weather applications
- 14:30–14:45 EGU2012-1843
P. O. Leye and P. Tarits
Ionosphere Activity Effects on Anthropogenic VLF Wave measured by DEMETER and Application to Earth Electromagnetic Survey
- 14:45–15:00 EGU2012-6356
D. Przepiórka, M. Gromadzki, M. Grzesiak, and H. Rothkaehl
Statistical plasma properties in relation to geomagnetic activity derived from Demeter data
- 15:00–15:15 EGU2012-9707
T. Onishi and J.-J. Berthelier
A statistical analysis of electrostatic turbulence obtained from plasma wave observation by DEMETER satellite
- 15:15–15:30 EGU2012-11339
IW McCrea, A Aikio, and the EISCAT_3D Science Working Group
Space Weather Studies with EISCAT_3D: Developing the Science Case

ST5.1/NH1.10/PS5.5 – Space Weather and its Effects on Terrestrial and Geo-Space Environments: Science and Applications (co-organized) – Posters

Convener: V. Pierrard | Co-Conveners: H. Rothkaehl, N. Crosby, M. Menvielle

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: H. Rothkaehl

- XY674 EGU2012-3945
Y. Zhang, A. M. Du, X. S. Feng, W. Sun, C. D. Fry, Y. Liu, C. S. Deehr, M. Dryer, and B. Zieger
 Simulated STEREO views of the Solar Wind Disturbances following the CMEs of 1 August 2010
- XY675 EGU2012-5320
Y.I. Yermolaev, N.S. Nikolaeva, I.G. Lodkina, and M.Y. Yermolaev
 Comparison of role of CIR, Sheath and ICME in generation of magnetic storms
- XY676 EGU2012-2341
H. Luo and G. X. Chen
 Solar wind parameters dependence of energy coupling between solar wind and magnetosphere during northward interplanetary magnetic field
- XY677 EGU2012-12544
N. Crosby, A. Veronig, E. Robbrecht, B. Vrsnak, S. Vennerstrøm, O. Malandraki, S. Dalla, N. Srivastava, M. Hesse, and D. Odstrcil
 Forecasting Geomagnetic Storms and Solar Energetic Particle Events: the COMESEP Project
- XY678 EGU2012-4778
 T. Rollett, C. Möstl, M. Temmer, **A.M. Veronig**, C.J. Farrugia, and H.K. Biernat
 Calculation of CME kinematics and propagation directions by constraining STEREO HI-images with in situ signatures at 1 AU
- XY679 EGU2012-2442
E.W. Wolff, M. Bigler, M.A.J. Curran, J.E. Dibb, M.M. Frey, M. Legrand, and J.R. McConnell
 Carrington Event not recorded in nitrate in polar ice cores
- XY680 EGU2012-8897
I. Shagimuratov, A. Krankowski, Iu. Cherniak, I. Zakharenkova, G. Yakimova, and L. Koltunen
 The response of GPS TEC to the sequence of September 2011 geomagnetic storms
- XY681 EGU2012-2339
S.L. Bruinsma
 Assessment of the Semi-Empirical Drag Temperature Model (DTM) in the Framework of the FP7 Project ATMOP
- XY682 EGU2012-3482
L. Lu
 Time sequence of ring current ion-flux enhancements and ion injections around outer radiation belt during a major storm on 15 May, 2005
- XY683 EGU2012-1769
V. Pierrard and K. Borremans
 Space weather effect on the inner magnetosphere: kinetic models for the plasmasphere-ionosphere coupled system, the polar wind and the radiation belts
- XY684 EGU2012-14358
D. Liddle and S. Eve
 Low cost missions for space weather monitoring
- XY685 EGU2012-5030
O.V. Khabarova
 Possible ways of space weather prediction improvement
- XY686 EGU2012-7843
E. Slominska and H. Rothkaehl
 Hemispheric asymmetry of the electron temperature distribution in the topside ionosphere
- XY687 EGU2012-9727
A. Janzhura and O. Troshichev
 Special features of procedure for PC index derivation in near-real time
- XY688 EGU2012-14082
P. Wintoft and M. Wik
 Predicting local ground magnetic field variations using empirical models
- XY689 EGU2012-4101
C. Stolle, J. Matzka, E. Sarauw, and L. W. Pedersen
 DTU Space magnetometer array
- XY690 EGU2012-9026
T.K. Breus and T.A. Zenchenko
 Biological object's rhythmic structure formation under influence of external environmental factors during evolution
- XY691 EGU2012-9153
T.A. Zenchenko and T.K. Breus
 Amplitude-time characteristics of the individual reactions of healthy people, to the action of meteorological factors
- XY692 EGU2012-7708
F. El-Lemdani Mazouz, C. Lathuillère, M. Menvielle, and S. Bruinsma
 A test of geomagnetic indices for a use in upper atmosphere density modelling

- XY693 EGU2012-6435
A. Prestes
Cause of the exceptionally high AE average for 2003
- XY694 EGU2012-3785
P. Stauning
Comparison of Polar Cap (PC) index calculations.
- XY695 EGU2012-3784
P. Stauning
New unifying procedure for PC index calculations.
- XY696 EGU2012-7854
C. Demetrescu and V. Dobrica
On the long-term evolution of the PC index
- XY697 EGU2012-10050
N. Podorozhkina, D. Sormakov, and O. Troshichev
Relation of PC index to magnetic disturbances developing under conditions of northward IMF
- XY698 EGU2012-9875
N. Podorozhkina and O. Troshichev
Invariability of relationship between the polar cap magnetic activity and geoeffective interplanetary electric field
- XY699 EGU2012-10216
O. Troshichev and A. Janzhura
PC index as an indicator of solar wind energy that entered into the magnetosphere: basis for the space weather monitoring
- XY700 EGU2012-10104
O. Troshichev, D. Sormakov, and A. Janzhura
Sawtooth substorms generated under conditions of the steadily high solar wind energy input into the magnetosphere: reasons for periodicity
- XY701 EGU2012-10149
O. Troshichev and A. Janzhura
Discrepancy between summer and winter PC indices observed in the course of magnetospheric substorms: Physical implications

PS5.1/ST6.2 – Planetary Plasma Physics, including electrodynamics of induced magnetospheres (with Arne Richter Award lecture) (co-organized) – Orals

Convener: P. Garnier | Co-Conveners: H. Opgenoorth, M. Lester

Room: 18

Chairperson: M. Lester

- 08:30–08:45 EGU2012-3965
Y. Wei, M. Fraenz, E. Dubinin, A. Coates, S. Barabash, and T. Zhang
A comet-like ionosphere at Venus in tenuous solar wind
- 08:45–09:00 EGU2012-4452
E. Dubinin, M. Fraenz, J. Woch, T.-L. Zhang, J. Wei, A. Fedorov, S. Barabash, and R. Lundin
Induced magnetic fields at Venus and their effect on ion escape
- 09:00–09:15 EGU2012-6835
M. N. Nishino, M. Fujimoto, H. Tsunakawa, H. Shibuya, F. Takahashi, H. Shimizu, M. Matsushima, and Y. Saito
Solar wind control of lunar external magnetic enhancement: A case study
- 09:15–09:30 EGU2012-10756
G Stenberg, H Nilsson, S Barabash, and Y Futaana
Precipitation of solar wind alpha-particles onto the ionospheres of Mars and Venus
- 09:30–09:45 EGU2012-9629
H. J. Opgenoorth, D. Andrews, N. Edberg, M. Lester, A. Williams, M. Fraenz, O. Witasse, F. Duru, and D. Morgan
Magnetospheric and Ionospheric Response to Solar Wind Variability at Mars
- 09:45–10:00 EGU2012-10547
D. D. Morgan, D. A. Gurnett, F. Duru, E. Dubinin, M. Fraenz, H. Opgenoorth, P. Withers, I. Mitrofanov, and J. J. Plaut
Flare Effects in Mars's Ionosphere Observed by Mars Express Topside Sounding

COFFEE BREAK

Chairperson: H. Opgenoorth

- 10:30–10:45 EGU2012-1489
F. Nemeč, D. D. Morgan, D. A. Gurnett, M. O. Fillingim, R. J. Lillis, and F. Duru
Nightside ionosphere of Mars: results from the MARSIS instrument
- 10:45–11:15 EGU2012-2369
A. Radioti
Transient auroral emissions at Jupiter and Saturn associated with magnetic reconnection (Arne Richter Award for Outstanding Young Scientists Lecture)
- 11:15–11:30 EGU2012-9169
J.N. Yates, N. Achilleos, and P Guio
Perturbation of the Jovian thermosphere by a transient solar wind pulse
- 11:30–11:45 EGU2012-6062
C.M. Jackman and J.A. Slavin
Comparing plasmoid structure in different planetary magnetospheres
- 11:45–12:00 EGU2012-6363
G. A. DiBraccio, J. A. Slavin, S. A. Boardsen, B. J. Anderson, H. Korth, T. H. Zurbuchen, J. M. Raines, R. L. McNutt, Jr., and S. C. Solomon
MESSENGER observations of magnetopause structure at Mercury
- 12:00–12:15 EGU2012-2597
L. Lorenzato, A. Sicard-Piet, and S. Bourdarie
A Physical Model of Electron Radiation Belts of Saturn
- 12:15–12:30 EGU2012-6526
I. Sillanpää, R. Ebert, H. Elliott, and E. Kallio
Preliminary Model for the Solar Wind Interaction with Pluto's Extended Plasma Tail

PS5.1/ST6.2 – Planetary Plasma Physics, including electrodynamics of induced magnetospheres (with Arne Richter Award lecture) (co-organized) – Posters

Convener: P. Garnier | Co-Conveners: H. Opgenoorth, M. Lester

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: M. Lester

- XY462 EGU2012-3223
G. Le, P. J. Chi, S. Boardsen, X. Blanco-Cano, J. A. Slavin, B. J. Anderson, and H. Korth
MESSENGER Magnetic Field Observations of Upstream Ultra-Low Frequency Waves at Mercury
- XY463 EGU2012-4883
G. Murakami, K. Yoshioka, H. Ishii, K. Uji, I. Yoshikawa, M. Kagitani, F. Tsuchiya, A. Yamazaki, and K. Uemizu
Extreme ultraviolet spectroscopy of the planetary magnetospheres from the earth-orbiting satellite
- XY464 EGU2012-2121
P. Israelevich and L. Ofman
Hybrid simulation of the shock wave trailing the Moon
- XY465 EGU2012-338
S. Fatemi, M. Holmström, and Y. Futaana
Modeling the Lunar Plasma Wake
- XY466 EGU2012-3863
Y. Saito, S. Yokota, M.N. Nishino, T. Yamamoto, K. Uemura, and H. Tsunakawa
Ions originating from the Moon surface / exosphere observed in the Earth's magnetosphere
- XY467 EGU2012-12169
A. Vorburger, **P. Wurz**, S. Barabash, M. Wieser, Y. Futaana, M. Holmström, A. Bhardwaj, M.B. Dhanya, R. Sridharan, and K. Asamura
Direct Observations of Magnetic Anomalies on the Lunar Surface under Varying Solar Wind Conditions
- XY468 EGU2012-4905
S. Dyadechkin, **R. Jarvinen**, and E. Kallio
Solar wind interaction with Venus and Mars in a spherical hybrid model
- XY469 EGU2012-8635
D J Andrews, M Fränz, M Lester, H Nilsson, H J Opgenoorth, M Pätzold, K Peter, and O Witasse
The configuration of the induced Martian magnetosphere and ionosphere during quiet solar wind conditions
- XY470 EGU2012-667
C. Dieval, G. Stenberg, S. Barabash, H. Nilsson, and A. Fedorov
Proton precipitation at Mars: statistical study and comparison with modelling studies.
- XY471 EGU2012-1509
S. McKenna-Lawlor, E. Kallio, M. Alho, R. Jarvinen, and V. Afonin
Comparisons between in situ measurements of the magnetic shadowing of high energy ions at Mars and hybrid model simulations, using contemporary particle and field measurements to define the upstream interplanetary conditions

- XY472 EGU2012-8665
J.-Y. Chaufray, F. Gonzalez-Galindo, F. Forget, M. Lopez-Valverde, F. Leblanc, R. Modolo, M. Yagi, S. Hess, P.-L. Blelly, and O. Witasse
 3D Model of the Martian Ionosphere
- XY473 EGU2012-8686
D J Andrews, M Fränz, H Nilsson, H J Opgenoorth, and O Witasse
 Anomalous structures observed in the nightside Martian ionosphere with the Mars Express topside radar sounder
- XY474 EGU2012-1449
P. Withers
 Simulations of the response of the Mars ionosphere to solar flares and solar energetic particle events
- XY475 EGU2012-5642
M. Fränz, E. Dubinin, Y. Wei, J. Woch, D. Morgan, S. Barabash, R. Lundin, and A. Fedorov
 Ion escape from the Martian Ionosphere
- XY476 EGU2012-8481
M. P. Freeman, C. M. Jackman, and M. F. Vogt
 A common process for magnetic reconfigurations at Earth, Jupiter and Saturn.
- XY477 EGU2012-7628
K. Szego, Z. Nemeth, Z. Bebesi, L. Foldy, G. Erdos, M. Thomsen, and D. Delapp
 Exploration of the magnetodisk of Saturn around equinox
- XY478 EGU2012-7901
Z. Nemeth, K. Szego, Z. Bebesi, G. Erdos, and L. Foldy
 The shape of the magnetodisk of Saturn - as revealed by in situ measurements
- XY479 EGU2012-8277
V. V. Yaroshenko, W. J. Miloch, and G. E. Morfill
 Cassini-plasma interactions in the Enceladus torus
- XY480 EGU2012-12757
E. Roussos, P. Kollmann, N. Krupp, C. Paranicas, A. Persoon, H. Kriegel, S. Simon, K. Khurana, S.M. Krimigis, and D.G. Mitchell
 Rhea's magnetospheric interaction: energetic electron observations by Cassini MIMI/LEMMS
- XY481 EGU2012-216
M. Andriopoulou, E. Roussos, N. Krupp, C. Paranicas, M. Thomsen, S. Krimigis, M. K. Dougherty, and K.-H. Glassmeier
 Evidence of a noon-to-midnight electric field in Saturn's inner magnetosphere, using microsignatures
- XY482 EGU2012-8582
N. Achilleos, C. S. Arridge, and P. Guio
 Modelling the Forces in Saturn's Warped Magnetodisc
- XY483 EGU2012-8849
P. Guio, N. Achilleos, O. Santolik, A. Masters, and C. Arridge
 Magnetic Field Statistics in Saturn's Magnetosphere
- XY484 EGU2012-11515
M. von Papen, J. Saur, and O. Alexandrova
 Turbulent Magnetic Field Fluctuations in the Kronian Magnetosphere
- XY485 EGU2012-6600
I. Sillanpää and R.E. Johnson
 Effects of Neutral Collisions and Charge Exchange to Titan Plasma Interaction

