

EGU General Assembly 2012
Programme Group Programme
PS – Planetary & Solar System Sciences

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Monday, 23 April

PS1.1 – Exploring the Solar System : Missions, Techniques and policy – Posters

Convener: C. Muller | Co-Conveners: P. Falkner, B.H. Foing, P. Ehrenfreund, N. Peter

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Christian Muller

XY451 EGU2012-3366

L. M. Prockter and the Europa Science Definition Team

Orbiter, Flyby and Lander Mission Concepts for Investigating Europa's Habitability

XY452 EGU2012-6927

T. R. Spilker, D. H. Atkinson, N. J. Strange, and D. Landau

US Decadal Survey Outer Solar System Missions: Trajectory Options

XY453 EGU2012-7353

V. Ciarletti, D. plettemeier, A.J. Vieau, R. Hassen-Khodja, B. Lustrement, P. Cais, and S. Clifford

Shallow characterization of the subsurface for the 2018 Mission to Mars

XY454 EGU2012-7716

M. Dechambre, V. Ciarletti, M. Biancheri-Astier, A. Saintenoy, F. Costard, and R. Hassen-Khodja

WISDOM GPR performance assessment in a cold artificial environment

XY455 EGU2012-13651

D. Landau, J. Brophy, J. Dankanich, and N. Strange

40-kW Solar Electric Propulsion Stage for Enhanced Robotic and Human Space Exploration

PS2.2 – Venus – Orals

Convener: H. Svedhem | Co-Conveners: D. Titov

Room: 32

Chairperson: D. Titov

13:30–13:45 EGU2012-12382

H. Svedhem, D. Titov, and C. Wilson

Present Status and Future of Venus Express and Results from Atmospheric Drag measurements

13:45–14:00 EGU2012-12558

D. Titov, H. Svedhem, W.J. Markiewicz, and C. Wilson

Cloud morphology and dynamics from the Venus Express observations

14:00–14:15 EGU2012-13791

T. Satoh, S. Ohtsuki, N. Iwagami, M. Ueno, K. Uemizu, M. Suzuki, G. L. Hashimoto, T. Sakanoi, Y.

Kasaba, R. Nakamura, T. Imamura, M. Nakamura, T. Fukuhara, A. Yamazaki, and M. Yamada

Venus' Clouds as Inferred from the Phase Curves Acquired by IR1 and IR2 on board Akatsuki

14:15–14:30 EGU2012-7874

A. Piccialli, D. Titov, H. Svedhem, and W. J. Markiewicz

Characterization of gravity waves at Venus cloud top from the Venus Monitoring Camera images

14:30–14:45 EGU2012-8097

J.-L. Bertaux, J.-Y. Chaufray, and F. Leblanc

First Observations of Venus UV dayglow at limb from SPICAV/Venus Express

14:45–15:00 EGU2012-5408

J.-C. Gérard, L. Soret, A. Migliorini, G. Piccioni, and P. Drossart

The oxygen nightglow emissions of Venus: vertical distribution and role of collisional quenching

Chairperson: H. Svedhem

15:30–15:45 EGU2012-12865

L. Zasova, I. Khatuntsev, A. Shakun, G. Piccioni, and P. Drossart

Night airglows in Venus atmosphere and dynamics around 100 km from VIRTIS-M VEX data.

Comparison with the Earth atmosphere.

15:45–16:00 EGU2012-4138

A. Mahieux, S. Robert, V. Wilquet, R. Drummond, A.C. Vandaele, and J.-L. Bertaux

A Venus atmospheric model at the Venus terminator obtained from SOIR solar occultations on board Venus Express

16:00–16:30 EGU2012-10023

S. Limaye, H. Svedhem, D. Titov, W. Markiewicz, C. Wilson, and L. Zasova

Updating the Venus International Reference Atmosphere (VIRA)

16:30–16:45 EGU2012-1308

R. Lundin, S. Barabash, S. Futaana, M. Holmstrom, H. Perez-de-Tejada, and J.-A. Sauvaud

Plasma vortices, lateral forcing, and the superrotating Venus atmosphere

- 16:45–17:00 EGU2012-11417
G. Arnold, R. Haus, and D. Kappel
 Construction of global maps of atmospheric and surface features of Venus based on new retrieval methods
- 17:00–17:15 EGU2012-6833
C. Sotin, G. Choblet, and S.E. Smrekar
 Venus thermal evolution and outgassing history: constraints from numerical simulations and Venus Express observations

GD1.1/PS2.7 – Planetary Geodynamics (co-organized) – Orals

Convener: S. C. Werner | Co-Conveners: D. Breuer, S. Buiter

Room: 30

Chairperson: Susanne Buiter, Doris Breuer, Stephanie Werner

- 08:30–08:45 EGU2012-5522
M. T. Zuber and D. E. Smith
 The Interior Structures of the Moon and Mercury from Recent Data
- 08:45–09:00 EGU2012-6321
A. Davaille, E. Di Giuseppe, and E. Mittelstaedt
 Dynamic regims and evolution of planetary mantles: insights from laboratory experiments with complex rheology fluids
- 09:00–09:15 EGU2012-14118
 B Steinberger and **SC Werner**
 On the possible deep origin of long-wavelength gravity anomalies on the Moon and Mercury
- 09:15–09:30 EGU2012-9422
L. Elkins-Tanton and S. Tikoo
 Delivery of volatiles to terrestrial planets during accretion: Setting the stage for plate tectonics
- 09:30–09:45 EGU2012-11940
 B.J. Foley and **D. Bercovici**
 Conditions for Plate Tectonics on Super-Earths: Inferences From Convection Models With Damage
- 09:45–10:00 EGU2012-13059
A.-C. Plesa and D. Breuer
 The Efficiency of Magma Ocean Cumulate Overturn using a strong temperature-dependent Viscosity

GD1.1/PS2.7 – Planetary Geodynamics (co-organized) – Posters

Convener: S. C. Werner | Co-Conveners: D. Breuer, S. Buiter

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Doris Breuer, Susanne Buiter, Stephanie Werner

- XL161 EGU2012-14236
L. Angheluta, M Assaf, and N Goldenfeld
 Dynamics of large-scale circulation in turbulent convection
- XL162 EGU2012-8572
P. J. Tackley, T. Nakagawa, and M. Armann
 The Strong Influence of Magmatic Heat Transport on Terrestrial Planetary Evolution
- XL163 EGU2012-14126
K. Burke, B Steinberger, TH Torsvik, SC Werner, and J Wilkinson
 Why are the Geoid and the Areoid so similar?
- XL164 EGU2012-10987
I. Karachevtseva, J. Oberst, ?. Konopikhin, K. Shingareva, E. Gusakova, A. Kokhanov, M. Baskakova, O. Peters, F. Scholten, M. Wählisch, and M. Robinson
 Mapping of the Lunokhod-1 Landing Site: A Case Study for Future Lunar Exploration
- XL166 EGU2012-12831
D. Mimoun, Ph Lognonné, S. Deraucourt, M. Urvoy, R. Zweifel, P. Mance, T. Garcia, O. Robert, T. Gabsi, S. Tillier, M. Wiczorek, T. Nébut, B. Lecomte, O. Pot, M. Bierwirth, and R. Roll
 Planetary Seismometers for the Moon, Mars and Asteroids
- XL167 EGU2012-6590
C. Schiffer and S. B. Nielsen
 Modelling of the Global Geopotential Energy & Stress Field
- XL168 EGU2012-5021
L. Ostrihansky and P. Kalenda
 Confirmation of the extraterrestrial forces decisive effect on earthquake triggering and lithospheric plates movement.

PS3.3 – Rings and icy satellites – Posters

Convener: L. Spilker | Co-Conveners: H. Hussmann, S. K. Atreya, A. Coustenis

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Hauke Hussman

- XY456 EGU2012-5823
W. Zheng, W.-H. Ip, and L.S. Teng
Lithospheric Flexural Modeling of Iapetus' Equatorial Ridge
- XY457 EGU2012-7908
A. Le Gall, S. Keilm, M.A. Janssen, L.C. Wye, R.D. Lorenz, and R. West
Microwave thermal emission from Iapetus' dark terrains
- XY458 EGU2012-7772
F. Scipioni, F. Tosi, F. Capaccioni, P. Cerroni, G. Filacchione, and C. Federico
Spectroscopic identification of Dione' and Rhea' terrain units using Cassini VIMS data
- XY459 EGU2012-7675
F. Scipioni, F. Tosi, F. Capaccioni, P. Cerroni, G. Filacchione, and C. Federico
Comparison between Dione' and Helene' surfaces using Cassini VIMS
- XY460 EGU2012-9733
M. Langhans, J.I. Lunine, and G. Mitri
Geomorphology and surface age of Titan's Xanadu Region
- XY461 EGU2012-9970
F. Sohl, **H. Hussmann**, A. Coustenis, M. Knapmeyer, C. Lange, A. Solomonidou, K. Stephan, and F.W. Wagner
Tidal Distortion of Titan: Implications for Surface Features and Tidal Measurements
- XY462 EGU2012-11912
M. Parisi, S. Finocchiaro, and L. Iess
Gravity Science with The JUICE Mission
- XY463 EGU2012-13487
J.-E. Wahlund, A. I. Eriksson, M. W. Morooka, G. Hospodarsky, and W. S. Kurth
Distribution and dynamics of dusty plasma in plumes of Enceladus
- XY464 EGU2012-10221
O. Hartmann, S. C. Werner, R. Wagner, B. A. Ivanov, and G. Neukum
Impact-mass Estimates for the Jovian and Saturnian System by Application of a Lunar-like Impact-chronology Model
- XY465 EGU2012-6890
L. Spilker, E. Deau, R. Morishima, G. Filacchione, M. Hedman, P. Nicholson, J. Colwell, and T. Bradley
Multi-wavelength studies of Saturn's rings to constrain ring particle properties and ring structure
- XY466 EGU2012-7039
G. Filacchione, F. Capaccioni, M. Ciarniello, P. D. Nicholson, M. M. Hedmann, R. N. Clark, P. Cerroni, L. J. Spilker, J. Colwell, and T. Bradley
Multi-wavelength studies of Saturn's rings to constrain ring particle properties and ring structure: the VIMS perspective
- XY467 EGU2012-7523
E. Deau
Physical properties of the Saturn's rings with the opposition effect.
- XY468 EGU2012-6054
A. Oancea, O. Grasset, E. Le Menn, L. Bezacier, O. Bollengier, S. Le Mouélic, and G. Tobie
IR reflectance spectroscopy of carbon dioxide clathrate hydrates. Implications for Saturn's icy moons.
- XY469 EGU2012-12636
L. W. Esposito, B. K. Meinke, N. Albers, and M. Sremcevic
A season in Saturn's rings: Cycling, recycling and ring history
- XY470 EGU2012-7061
G. Filacchione, F. Capaccioni, M. Ciarniello, R. N. Clark, P. D. Nicholson, D. P. Cruikshank, J. N. Cuzzi, M. M. Hedman, F. Tosi, B. J. Buratti, P. Cerroni, and R. H. Brown
Constraining the radial distribution of water ice and chromophores across Saturn's rings, regular and minor satellites

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. Berthelier, 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

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.

Tuesday, 24 April

GM5.1 – Aeolian Processes and Landforms (co-listed) – Orals

Convener: J.M. Nield | Co-Conveners: J. King

Room: 21

Chairperson: J.M. Nield and J. King

- 15:30–15:45 EGU2012-796
Z. S. Lee and A.C.W Baas
 Investigating boundary layer turbulence for aeolian sand transport
- 15:45–16:00 EGU2012-12842
F. Baart, J. den Bieman, M. van Koningsveld, A.P. Luijendijk, E.J.R. Parteli, N.G. Plant, J.A. Roelvink, J.E.A. Storms, S. de Vries, J.S.M. van Thiel de Vries, and Q. Ye
 An integrated coastal model for aeolian and hydrodynamic sediment transport
- 16:00–16:15 EGU2012-177
J. Roskin, H. Tsoar, N. Porat, and D.G. Blumberg
 Palaeoclimate interpretations of Late Pleistocene vegetated linear dune mobilization episodes: evidence from the northwestern Negev dunefield, Israel
- 16:15–16:30 EGU2012-6165
 T. Barchyn and **C. Hugenholtz**
 Predicting vegetation-stabilized dune morphology
- 16:30–16:45 EGU2012-2814
M. Dluzewski
 Barchan dunes morphology dynamics under different environmental conditions
- 16:45–17:00 EGU2012-876
I. Ashpole and R. Washington
 Interannual variability in dust emissions from the western Sahara: links to the West African Monsoon.

GM5.1 – Aeolian Processes and Landforms (co-listed) – Posters

Convener: J.M. Nield | Co-Conveners: J. King

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: J. King and J.M. Nield

- XL232 EGU2012-3134
A.C.W. Baas, D.W.T. Jackson, J.A.G. Cooper, K. Lynch, I. Delgado-Fernandez, and J.H.M. Beyers
 Sand Transport under Highly Turbulent Airflow on a Beach Surface
- XL233 EGU2012-6201
C. Hugenholtz, C. McKenna Neuman, B. Li, T. Barchyn, and S. Sanderson
 What drives intermittent aeolian saltation at high-frequency?
- XL234 EGU2012-214
S. de Vries, S.M. Arens, M.J.F. Stive, and R. Ranasinghe
 A new modelling concept for aeolian sediment transport on beaches
- XL235 EGU2012-762
L.H. Vircavs, J.M. Nield, J. Leyland, and S.E. Darby
 A Comparison of Aerodynamic Roughness and Surface Roughness Measurements Derived from Terrestrial Laser Scanning Over Ice and Sandar Surfaces
- XL236 EGU2012-8317
J.M. Nield, J.A. Gillies, and W.G. Nickling
 Quantifying roughness density of vegetation and nebkha dunes in the Chihuahuan Desert, New Mexico, USA using terrestrial laser scanning
- XL237 EGU2012-5431
P. Vermeesch
 A 45-year time series of Saharan dune mobility from remote sensing
- XL238 EGU2012-13165
B. Liu, T.J. Coulthard, and S.J. McLelland
 Interaction between sand dunes and rivers, and the impact on geomorphology
- XL239 EGU2012-3546
 D. Zhang, **C. Narteau**, O. Rozier, and S. Courrech du Pont
 Morphodynamics of star dunes
- XL240 EGU2012-2600
K. Biejat
 Possibility of star (pyramid) dune development in the area of bimodal wind regime

- XL241 EGU2012-389
N. Bhatt
100 Kyr Old Desert of Western India: Morhodynamics and Environmental Significance
- XL242 EGU2012-3969
Y. Ohno, M. Kasai, and T. Marutani
Dune development and migration to damage long established vegetation colonies in the lahar deposition zone of Ruapehu Volcano, New Zealand
- XL243 EGU2012-12424
E. Miccadei, **T. Piacentini**, F. Mascioli, F. Daverio, and R. Di Michele
Geomorphological features of coastal dunes along the central Adriatic coast (Abruzzo, Italy)
- XL244 EGU2012-9142
S. Costas, S. Jerez, R. Trigo, R. Goble, and L. Rebelo
Pulses of aeolian activity and westerly winds intensification in the Portuguese coast during cooling climate events
- XL245 EGU2012-8326
M. Brook, M. Shepherd, R. Tinkler, and J. Williams
Ground-penetrating radar (GPR) stratigraphy of late-Pleistocene relict foredunes on a coastal barrier: Matakana Island, New Zealand
- XL246 EGU2012-176
J. Roskin, O. Rozenstein, H. Tsoar, D. G. Blumberg, and N. Porat
Sand rubification with time? The case of the Sinai - Negev erg
- XL247 EGU2012-9779
J. King, G.F.S. Wiggs, F.D. Eckardt, D.S.G. Thomas, R.G. Bryant, and R. Washington
DO4 Models: A new generation of model dust emission schemes based on source area process data
- XL248 EGU2012-278
F. Youssef, S. Visser, D. Karssenbergh, E. Slingerland, G. Erpul, F. Ziadat, and L. Stroosnijder
Strategies for Measuring Wind Erosion for Regional Scale Modeling
- XL249 EGU2012-6586
S. W?owska and B. Woronko
Potential source regions of dust accumulated in northern Africa

PS2.2 – Venus – Posters

Convener: H. Svedhem | Co-Conveners: D. Titov

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: H. Svedhem

- XY407 EGU2012-11974
Y. Ma, A.F. Nagy, C.T. Russell, D. Najib, and G. Toth
Multi-fluid MHD study of the solar wind interaction with Venus at Solar max and Solar min conditions
- XY408 EGU2012-7731
R. Jarvinen, A.J. Coates, T.L. Zhang, S. Barabash, A. Fedorov, and E. Kallio
Can magnetic connectivity be used to interpret Venus Express photoelectron observations? - A global hybrid modelling study
- XY409 EGU2012-11723
T. Nordstrom, G. Stenberg, H. Nilsson, S. Barabash, and Y. Futaana
Ion escape from Venus using statistical distribution functions
- XY410 EGU2012-2498
J. T. M. Daniels, C. T. Russell, R. J. Strangeway, H. Leinweber, and T. L. Zhang
Whistler mode signals due to Venus lightning: Dispersion observed in Venus ionosphere with the Venus Express magnetometer
- XY411 EGU2012-4154
H. Matsui, **A. Mahieux**, S. Robert, V. Wilquet, R. Drummond, A. C. Vandaele, N. Iwagami, and J.-L. Bertaux
Investigation of the HDO/H₂O ratio on Venus from SOIR solar occultations on board Venus Express
- XY412 EGU2012-915
Y. J. Lee, D. Titov, N. Ignatiev, S. Tellmann, M. Paetzold, and G. Piccioni
Meridional trends in the radiative energy balance of the Venus mesosphere
- XY413 EGU2012-7574
I. Soret, J.-C. Gérard, G. Piccioni, and P. Drossart
Understanding of the Venus upper atmosphere dynamics with O₂(a₁?) Venus Express observations
- XY414 EGU2012-2886
A. Stiepen, J.-C. Gérard, L. Soret, and J.-L. Bertaux
The Venus nitric oxide nightglow vertical distribution: update, new features and modelling

- XY415 EGU2012-10427
A. Migliorini, G. Piccioni, J.-C. Gérard, T. Slangier, M. Snels, and P. Drossart
 Oxygen nightglow emissions in the Venus atmosphere, observed by the visible channel of VIRTIS/Venus Express
- XY416 EGU2012-10549
A. Migliorini, D. Grassi, G. Piccioni, S. Lebonnois, L. Montabone, and P. Drossart
 Atmospheric temperature in the Venus mesosphere, investigated by VIRTIS/Venus Express
- XY417 EGU2012-4178
S. Takagi, A. Mahieux, S. Robert, V. Wilquet, R. Drummond, A. C. Vandaele, and N. Iwagami
 A model to study the Venus cloud structure based on recent ground-based and space observations
- XY418 EGU2012-9708
D. Kappel, G. Arnold, and R. Haus
 Retrieval of Surface Emissivity in a Venus Coordinate Patch as Parameter Common to Repeated Measurements by VIRTIS/VEX
- XY419 EGU2012-6314
E.V. Shalygin, A.T. Basilevsky, D.V. Titov, W.J. Markiewicz, F. Scholten, Th. Roatsch, M.A. Kreslavsky, L.V. Moroz, and N.I. Ignatiev
 Geologic interpretation of the near-infrared images of area SW of Beta Regio taken by the Venus Monitoring Camera
- XY420 EGU2012-6328
 A.T. Basilevsky, **E.V. Shalygin**, W.J. Markiewicz, D.V. Titov, Th. Roatsch, and M.A. Kreslavsky
 Search for ongoing volcanic activity on Venus: Case study of Maat Mons, Sapas Mons and Ozza Mons

PS2.4 – Mars Science and Exploration – Orals

Convener: A.F. Chicarro | Co-Conveners: A. P. Rossi, D. Loizeau

Room: 18

Chairperson: n.n.

- 08:30–08:45 EGU2012-1310
R. Lundin, S. Barabash, M. Yamauchi, H. Nilsson, E. Dubinin, and D. Winningham
 Alfvén wave acceleration and ion outflow from Mars
- 08:45–09:00 EGU2012-8463
A. Fedorov, S. Barabash, and J.-A. Sauvaud
 Martian magnetic anomalies and ionosphere escape rate.
- 09:00–09:15 EGU2012-9977
X.-D. Wang, S. Barabash, Y. Futaana, A. Grigoriev, and P. Wurz
 Global directional distribution of the hydrogen energetic neutral atom emission from Mars as measured by Mars Express ASPERA-3
- 09:15–09:30 EGU2012-10127
M. Vincendon, J. Audouard, Y. Langevin, F. Poulet, G. Bellucci, J.-P. Bibring, and B. Gondet
 Mars hemispherical albedo map: absolute value and interannual variability inferred from OMEGA data.
- 09:30–09:45 EGU2012-3204
M. Manga, A. Patel, J. Dufek, and E.S. Kite
 Wet surface and dense atmosphere on early Mars suggested by the bomb sag at Home Plate, Mars
- 09:45–10:00 EGU2012-1502
N. Mangold, S. Adeli, S. Conway, V. Ansan, and B. Langlais
 A Chronology Of Mars Climatic Evolution From Impact Crater Degradation

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2012-13541
S. M. Clifford, T. J. Parker, J. Mouginot, A. Pommerol, P. Beck, and W. Kofman
 Evidence and Arguments for an Early Martian Ocean
- 10:45–11:00 EGU2012-5134
A. Frigeri, R. Orosei, M. Cartacci, A. Cicchetti, G. Mitri, S. Giuppi, R. Noschese, G. Picardi, and J. Plaut
 Three Dimensional Structure of the Mars North Polar Basal Unit from MARSIS data
- 11:00–11:15 EGU2012-10161
G. M. Martinez, N. O. Renno, and H. M. Elliott
 Composition of Dark Spots in Mars' Richardson Crater from the Analysis of HiRISE Images

- 11:15–11:30 EGU2012-1407
N. Bost, F. Westall, C. Ramboz, C. Fontaine, A. Meunier, and F. Foucher
 Hydrothermal, deuteric and acidic basalt alteration at the Skouriotissa Mine, Cyprus: relevance for Mars.
- 11:30–11:45 EGU2012-6445
J. Carter and F. Poulet
 Global investigation of hydrated exposures on Mars: Evidence for a clay cycle
- 11:45–12:00 EGU2012-6134
F. Poulet, A. Ody, J.-P. Bibring, Y. Langevin, and B. Gondet
 Reconciling the petrology of SNCs and the composition of the mafic regions of Mars from NIR data

LUNCH BREAK

Room: 27

Chairperson: n.n.

- 13:30–13:45 EGU2012-14157
F. Ferri, F. Forget, S.R. Lewis, and Ö. Karatekin
 ExoMars Atmospheric Mars Entry and Landing Investigations and Analysis (AMELIA)
- 13:45–14:00 EGU2012-9118
A. Malakhov, I. Mitrofanov, A. Sanin, M. Litvak, A. Kozyrev, V. Tretiyakov, M. Mokrousov, A. Vostrukhin, D. Golovin, and F. Fedosov
 Fine Resolution Epithermal Neutron Detector (FREND) for ExoMarsTrace Gas Orbiter
- 14:00–14:15 EGU2012-12335
F. Rull, G. Klingelhöfer, J. Martinez-Frias, J. Medina, J.A. Rodriguez, and E. Lalla
 RAMAN-LIBS and MÖSSBAUER Spectroscopic Study of Alteration Minerals from Potential MARS Analogue Areas in TENERIFE ISLAND (SPAIN)
- 14:15–14:30 EGU2012-13616
J.-L. Josset, F. Westall, B.A. Hofmann, J.G. Spray, C. Cockell, S. Kempe, A.D. Griffiths, M.C. De Sanctis, L. Colangeli, D. Koschny, D. Pullan, K. Föllmi, L. Diamond, M. Josset, E. Javaux, F. Esposito, and D. Barnes
 CLUPI, a high-performance imaging system on the ESA-NASA rover of the 2018 ExoMars mission to discover biofabrics on Mars
- 14:30–14:45 EGU2012-12945
P. Lognonne, W.B. Banerdt, D. Giardini, U. Christensen, D. Mimoun, S. de Raucourt, A. Spiga, R. Garcia, A. Mocquet, M. Panning, E. Beucler, L. Boschi, W. Goetz, T. Pike, C. Johnson, R. Weber, M. Wieczorek, K. Larmat, N. Kobayashi, J. Tromp and the InSight SEIS VBB Team
 The InSight VBB Seismometer: From Signal and Noise to Internal Structure.
- 14:45–15:00 EGU2012-23
A.F. Chicarro
 MNSM - A Future Mars Network Science Mission
- 15:00–15:15 EGU2012-12664
L. Iess, S. Giuliani, and V. Dehant
 Mars' rotational state and tidal deformations from radio interferometry of a network of landers.
- 15:15–15:30 EGU2012-10326
M. Jain, T. Lapp, M.T. Andersen, S. Hannemann, A.S. Murray, G.A.T. Duller, and J. Merrisen
 Development of a luminescence planetary surface dating instrument

PS2.4 – Mars Science and Exploration – Posters

Convener: A.F. Chicarro | Co-Conveners: A. P. Rossi, D. Loizeau

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: A. Chicarro

- XY421 EGU2012-2406
M. Bamberg, R. Jaumann, and H. Asche
 Floor Fractured Craters around Syrtis Major, Mars
- XY422 EGU2012-12998
D. Breuer, A. P. Rossi, M. Grott, T. Spohn, and MNSM Team
 MNSM: What we can learn from heat flow measurements and the detection of geological active regions on Mars
- XY423 EGU2012-10155
L. Castaldo, G. Alberti, G. Cirillo, A. Frigeri, and R. Orosei
 Calibration over North Polar Caps of SHARAD data

- XY424 EGU2012-5158
A. Cicchetti, M. Cartacci, A. Frigeri, S. Giuppi, R. Noschese, R. Orosei, C. Nenna, and A.B. Ivanov
MARSIS: The North Polar Cap Campaign
- XY425 EGU2012-11667
G. Crosta, R. Castellanza, F. De Blasio, and S. Utili
Slope stability analysis for Valles Marineris, Mars: a numerical analysis of controlling conditions and failure types
- XY426 EGU2012-13697
V. Dehant, W. Folkner, S. Asmar, A. Rivoldini, T. Van Hoolst, and B. Banerdt
Interior of Mars from InSight geodesy
- XY427 EGU2012-9002
A. Delgado-Bonal, E. Simoncini, and F.J. Martín-Torres
Thermodynamic disequilibrium as a biomarker in Mars
- XY428 EGU2012-9034
A. Delgado-Bonal, E. Simoncini, and F.J. Martín-Torres
Thermodynamic study of a martian cave
- XY429 EGU2012-9722
F. Esposito, F. Montmessin, S. Debei, G. Colombatti, A-M. Harri, J-P. Pommereau, C. Wilson, A. Aboudan, C. Molfese, M. Zaccariotto, R. Mugnolo and the DREAMS International Team
The DREAMS payload on-board the Entry and descent Demonstrator Module of the ExoMars mission
- XY430 EGU2012-6592
M. C. De Sanctis, A. Coradini, E. Ammannito, A. Boccaccini, **T. Di Iorio**, E. Battistelli, and A. Capanni
MA_MISS: Mars Multispectral Imager for Subsurface Studies
- XY431 EGU2012-12565
A. Geminale, D. Grassi, V. Formisano, A. García Muñoz, G. Sindoni, and M. Giuranna
Interannual study and vertical profiles of the oxygen day-glow in the Martian atmosphere with data of PFS-MeX
- XY432 EGU2012-5376
S. Giuppi, M. Cartacci, A. Cicchetti, A. Frigeri, R. Noschese, and R. Orosei
MARSIS Data Bad Time Stamp: Analysis and Solution of an Anomaly Event in a Space Mission
- XY433 EGU2012-13494
J. Kozakiewicz, A. Kulak, and J. Mlynarczyk
Schumann Resonances on Mars - a Two-layer Ground Case
- XY434 EGU2012-14463
M. Kudryashova, P. Rosenblatt, V. Lainey, S. Le Maistre, and J. C. Marty
Improvement of the ephemerides of the Martian moons from the amelioration of the Martian spacecraft orbits: Investigating a data-arc splitting method
- XY435 EGU2012-12320
Y. Langevin, K. Seelos, P. Russel, J-P. Bibring, B. Gondet, and M. Vincendon
Inter-annual variability of H₂O ice deposits observed in late summer, at the time of minimum extent of the Southern polar cap of Mars
- XY436 EGU2012-7172
D. Loizeau, S. C. Werner, N. Mangold, J.-P. Bibring, and J. Vago
Chronology of deposition and alteration in the Mawrth Vallis region of Mars
- XY437 EGU2012-11853
H. M. Elliott, **G. M. Martinez**, D. G. Halleaux, S. F. Braswell, and N. O. Renno
An Environmental Chamber to Investigate Liquid Saline Water in the Martian Polar Region
- XY438 EGU2012-5289
N. Mateshvili, D. Fussen, G. Mateshvili, I. Mateshvili, F. Vanhellemont, E. Kyrölä, S. Tukiainen, J. Kujanpää, C. Bingen, C. Robert, C. Tétard, E. Dekemper, N. Loodts, and T. Paatashvili
Martian atmospheric ozone column content and dust optical depth retrieved from SPICAM nadir measurements in twilight conditions.
- XY439 EGU2012-10145
S.Y. Nikiforov, M.L. Litvak, I.G. Mitrofanov, A.B. Varenikov, and A.B. Sanin
The analysis of MSL landing site using HEND/Odyssey and GRS/Odyssey data
- XY440 EGU2012-2130
V. Parro and the SOLID Team
SOLID (Signs Of Life Detector) concept instrument for detection of subsurface life on Mars: results from Rio Tinto, Atacama and Antarctic permafrost terrestrial analogs.
- XY441 EGU2012-8462
L. B. S. Pham, O. Karatekin, and V. Dehant
Effects of impacts on atmospheric mass evolution and climate of Mars
- XY442 EGU2012-13103
D. Plettemeier, V. Ciarletti, P. Cais, W.-S. Benedix, H. Zhang, S.-E. Hamran, and S. Clifford
Analysis of Fully Polarimetric Laboratory Measurements Performed with the WISDOM Radar

- XY443 EGU2012-4551
M. Restano, M. Mastrogiuseppe, A. Masdea, G. Picardi, and R. Seu
 Martian magnetic minerals signature detection by Shallow Radar (SHARAD)
- XY444 EGU2012-4644
 G. Picardi, A. Masdea, M. Mastrogiuseppe, **M. Restano**, and R. Seu
 Planetary radar data inversion techniques improvement
- XY445 EGU2012-3362
 A. C. Vandaele, J.-J. López-Moreno, M. R. Patel, G. Bellucci, F. Daerden, R. Drummond, E. Neefs, **S. Robert**,
 J. Rodriguez Gomez and the NOMAD Team
 NOMAD, a spectrometer suite for Nadir and Solar Occultation observations on the ExoMars Trace Gas Orbiter
- XY446 EGU2012-13621
H. Steininger and W. Goetz
 Pyrolysis-GC-MS analysis of samples collected during AMASE11
- XY447 EGU2012-8829
B. Van Hove and O. Karatekin
 Atmospheric reconstruction from Phoenix entry data
- XY448 EGU2012-5908
H. Y. Wei, M. M. Cowee, and C. T. Russell
 Ion cyclotron waves around Mars: observations and simulations
- XY449 EGU2012-9105
L. Wendt, J. L. Bishop, and G. Neukum
 Phyllosilicates in the Knob Fields around Ariadnes Colles on Mars: Stratigraphy, Mineralogy and Morphology

PS3.1 – Outer planet satellites with an atmosphere – Orals

Convener: A. Coustenis | Co-Conveners: S. K. Atreya, Ph.D. Orton, J.-P. Lebreton

Room: 28

Chairperson: A. Coustenis

- 15:30–15:45 EGU2012-8433
A.J. Coates, A. Wellbrock, G.R. Lewis, F.J. Crary, M.F. Thomsen, D.B. Reisenfeld, K. Szego, Z. Bebesi,
 C.S. Arridge, G.H. Jones, E.C. Sittler Jr, and R.E. Johnson
 Cassini in Titan's tail: CAPS observations of plasma escape
- 15:45–16:00 EGU2012-2415
A. Coustenis, G. Bampasidis, S. Vinatier, R. Achterberg, P. Lavvas, C. Nixon, D. Jennings, N. Teanby,
 F. M. Flasar, R. Carlson, G. Orton, P. Romani, and E. Guandique
 Celebrating Titan's one year atmospheric evolution since Voyager with Cassini/CIRS
- 16:00–16:15 EGU2012-6158
 M. Choukroun and **C. Sotin**
 Is Titan's shape explained by its meteorology and carbon cycle?
- 16:15–16:30 EGU2012-12725
 J. Mitchell, M. Adamkovics, **R. Caballero**, and E. Turtle
 Planetary-scale waves and the meteorology of Titan's tropics
- 16:30–16:45 EGU2012-11598
A.G. Hayes, W.E. Dietrich, M.M. Manga, A. Lucas, and O. Aharonson
 Lacustrine Geomorphology on Titan; Glimpses into the Evolution of Titan's Polar Landscapes over
 Multiple Timescales
- 16:45–17:00 EGU2012-1295
T. Tokano
 Mountain torque and its influence on the atmospheric angular momentum on Titan

PS3.3 – Rings and icy satellites – Orals

Convener: L. Spilker | Co-Conveners: H. Hussmann, S. K. Atreya, A. Coustenis

Room: 28

Chairperson: Linda Spilker

- 13:30–13:45 EGU2012-7319
E. Deau, L. Spilker, R. West, L. Dones, R. Morishima, and C. Dobson
 Looking at Saturn's B ring over 6 decades of wavelength with old and new data
- 13:45–14:00 EGU2012-9104
C.D. Murray, N.O. Attree, N.J. Cooper, and G.A. Williams
 The Structure of Saturn's F Ring
- 14:00–14:15 EGU2012-11409
S. Kempf, R. Srama, G. Moragas-Klostermeyer, J. Schmidt, F. Spahn, and M. Horanyi
 Saturn's egg-shaped E ring

- 14:15–14:30 EGU2012-13079
B. E. Schmidt, D. D. Blankenship, G. W. Patterson, and P. M. Schenk
 Europa's Great Lakes
- 14:30–14:45 EGU2012-10890
C. Howett, J.R. Spencer, P. Schenk, R.E. Johnson, C. Parnicas, T. Hurford, A. Verbiscer, and M Segura
 Tethys' High-Amplitude Thermal Inertia Anomaly of Probable Magnetospheric Origin
- 14:45–15:00 EGU2012-7814
R. Jaumann, K. Stephan, R.H. Brown, R.N. Clark, G. Filacchione, B.J. Buratti, R.M. Nelson, P.D. Nicholson, S. Le Mouélic, S. Rodriguez, G.B. Hansen, T. Roatsch, F. Capaccioni, and C. Sotin
 Enceladus: Correlation of Surface Particle Distribution and Geology
- 15:00–15:15 EGU2012-12018
M. R. Showalter, D. P. Hamilton, H. A. Weaver, S. A. Stern, A. J. Steffl, and L. A. Young
 Pluto's "P4" and the Search for Additional Rings and Moons

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

PS6.1 – Exoplanets: formation, dynamics and processes – Orals

Convener: D. Winterhalter | Co-Conveners: L. Kaltenegger, J. Cho, A. Segura

Room: 32

Chairperson: Daniel Winterhalter

- 10:30–10:45 EGU2012-6561
W J Borucki and D G Koch
 KEPLER: Status, Results, and Plans
- 10:45–11:00 EGU2012-7033
H. Rauer and C. Catala
 The PLATO mission
- 11:00–11:15 EGU2012-10065
S. Unwin
 Coronagraphic Imaging of Exoplanets from a High Altitude Balloon Platform
- 11:15–11:30 EGU2012-13409
M. Swain
 FINESSE - the Fast INfrared Exoplanet Spectroscopy Survey Explorer
- 11:30–11:45 EGU2012-11532
T. V. Johnson, O. Mousis, J. I. Lunine, and N. Madhusudhan
 Planetesimal Compositions in Exoplanet Systems based on Host Star Composition
- 11:45–12:00 EGU2012-13318
L. Kaltenegger
 Concepts of the Habitable Zone

12:00–12:15 EGU2012-9361

S. Noda, **M. Ishiwatari**, K. Nakajima, Y. O. Takahashi, Y. Morikawa, S. Nishizawa, and Y.-Y. Hayashi
Atmospheric General Circulations of Synchronously Rotating Terrestrial Planets: Dependence on
Planetary Rotation Rate

Wednesday, 25 April

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. Levasseur-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. Levasseur-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

PS2.3 – Lunar Science and Exploration – Orals

Convener: B.H. Foing | Co-Conveners: H. Hiesinger

Room: 32

Chairperson: H. Hiesinger

10:30–10:45 EGU2012-13446

M. T. Zuber, D. E. Smith, and The GRAIL Science Team

First Observations of Lunar Gravity by GRAIL

10:45–11:00 EGU2012-5152

R.C. Weber and **M. Knapmeyer**

Recovery of Deep Moonquake Focal Mechanisms

11:00–11:15 EGU2012-9961

M. Grande, J. A. Carter and the The C1XS Team

New Elemental Maps of the Nearside Lunar Highlands

11:15–11:30 EGU2012-7113

M. Litvak, I. Mitrofanov, A. Sanin, W. Boynton, K. Harshman, J. Droege, A. Malakhov, D. Golovin, R. Starr, and L. Evans

Global mapping of lunar neutron flux by LEND/LRO

11:30–11:45 EGU2012-11599

V. Tretyakov, I. Mitrofanov, M. Litvak, A. Malakhov, and M. Mokrousov

Investigations of Moon Polar Regions from Luna-Resource and Luna-Glob Landers - Science Instruments and Operational Plan on Surface

11:45–12:00 EGU2012-8062

A. Sanin, I. Mitrofanov, M. Litvak, W. Boynton, L. Evans, K. Harshman, A. Malakhov, and R. Starr

Testing Lunar Permanently Shadowed Regions for Water Ice: LEND Results from LRO

LUNCH BREAK

Chairperson: H. Hiesinger

13:30–13:45 EGU2012-7852

U. Mall, R. Bugiolacchi, and M. Bhatt

Quantitative investigation of the mineral pyroxene using NIR SIR-2 data

13:45–14:00 EGU2012-11589

W. M. Vaughan, J. W. Head, P. C. Hess, L. Wilson, G. A. Neumann, D. E. Smith, and M. T. Zuber

Lunar Orientale Basin Melt Lake: Depth and Differentiation

14:00–14:15 EGU2012-8410

H. Hiesinger, C. H. van der Bogert, J. H. Pasckert, N. Schmedemann, M. S. Robinson, B. Jolliff, and N. Petro

New Crater Counts of the South Pole-Aitken Basin

14:15–14:30 EGU2012-12540

K.E. Bauch and H. Hiesinger

Rock Concentration and Thermal Inertia of Selected Lunar Study Regions.

14:30–14:45 EGU2012-6950

P. M. Travnicek and the L-DEPP Team

Lunar Dust Environment and Plasma Package for Lunar Lander - Denition Study

14:45–15:00 EGU2012-9323

D. Golovin, I. Mitrofanov, Y. Barmakov, E. Bogolubov, M. Litvak, A. Sanin, A. Kozyrev, A. Malakhov, M. Mokrousov, V. Schatzkij, G. Smirnov, V. Ryzhkov, I. Kurdumov, V. Shvetsov, V. Tretyakov, A. Varenikov, and A. Vostrukhin

ADRON Instrument for Luna-Resource and Luna-Glob Missions

15:00–15:15 EGU2012-5100

V. Iafolla, C. Carmisciano, E. Fiorenza, C. Lefevre, C. Magnafico, R. Peron, F. Santoli, S. Nozzoli, D. Ungaro, and S. Argada

ISA accelerometer and Lunar science

PS2.3 – Lunar Science and Exploration – Posters

Convener: B.H. Foing | Co-Conveners: H. Hiesinger

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: H. Hiesinger

- XY483 EGU2012-4937
E. Kallio, R. Jarvinen, S. Dyadechkin, P. Wurz, and S. Barabash
Modelling of the solar wind interaction with the Moon at macro and micro scales
- XY484 EGU2012-6755
H. Noda, H. Kunimori, H. Araki, T. Fuse, H. Hanada, M. Katayama, T. Otsubo, S. Sasaki, S. Tazawa, S. Tsuruta, K. Funazaki, H. Taniguchi, and K. Murata
Lunar Laser Ranging Experiment for Japanese SELENE-2 landing mission
- XY485 EGU2012-12198
A. Maier and O. Baur
Lunar gravity field recovery: sensitivity studies from simulated tracking data
- XY486 EGU2012-7218
Y. Su, B. Zhou, L. Zheng, J.Q. Feng, S. Dai, G.H. Zhang, H. Li, L. Geng, C.L. Li, and G.Y. Fang
The CE-3 lunar ground-penetrating radar experiment
- XY487 EGU2012-11258
L. Zheng, Y. Su, J.Q. Feng, Y.Z. Gao, S. Dai, Z.B. Zhang, and C.L. Li
A method of regolith dielectric constant inversion with Lunar Penetrating Radar onboard the Lunar Rover of Chang'e-3
- XY488 EGU2012-13547
R.L. Kirk, E. Howington-Kraus, T.L. Becker, D. Cook, J.M. Barrett, C.D. Neish, B.J. Thomson, and D.B.J. Bussey
Progress in Radargrammetric Analysis of Mini-RF Lunar Images
- XY489 EGU2012-12529
H. Li, W. Zuo, G.-L. Zhang, and Y. Su
Using 3D Axisymmetric model to analyze topography effects on Lunar surface heat flow and subsurface temperature
- XY490 EGU2012-12082
J.-Q. Feng, Y. Su, X.-Z. Zhang, J.-J. Liu, L. Zheng, and Q. Fu
A normalization model of Lunar surface brightness temperature: based on data obtained by CE-1 MRM and CE-2 MRM
- XY491 EGU2012-11034
A. Grumpe, F. Belkhir, V. Zirin, and C. Wöhler
Normalisation of hyperspectral data with respect to illumination and local topography
- XY492 EGU2012-5239
G. Serventi, M. Sgavetti, **C. Carli**, and L. Pompilio
The importance of plagioclase in the reflectance spectra of Fe, Mg mixtures: a better understanding of spectra from Lunar and Hermean terrains.
- XY493 EGU2012-8755
F. Thiessen, H. Hiesinger, C. H. van der Bogert, J. H. Pasckert, and M. S. Robinson
Light Plains in the South-Pole Aitken Basin: Surface Ages and Mineralogical Composition
- XY494 EGU2012-10988
T. Krüger, H. Hiesinger, and C.H. van der Bogert
Geologic mapping and stratigraphic investigations of the lunar crater Tycho
- XY495 EGU2012-11327
Z. B. Zhang, W. Zuo, X. Q. Wang, L. Geng, and C. L. Li
Global Crater Detection Using Chang-E2 DEM and Optical Image Data and Extension of Lunar Crater Catalogues
- XY496 EGU2012-11952
Y. Liu, J. Liu, L. Mu, and C. Li
The Survey of Impact Crater Detection Algorithm
- XY497 EGU2012-12220
A. Vorburger, **P. Wurz**, S. Barabash, M. Wieser, Y. Futaana, M. Holmström, A. Bhardwaj, M.B. Dhanya, R. Sridharan, and K. Asamura
Energetic Neutral Atom Imaging of the Lunar Surface
- XY498 EGU2012-12204
A. Vorburger, **P. Wurz**, S. Barabash, M. Wieser, Y. Futaana, M. Holmström, A. Bhardwaj, M.B. Dhanya, R. Sridharan, and K. Asamura
Angular Scattering of Energetic Neutral Hydrogen Atoms off the Lunar Surface
- XY499 EGU2012-10220
P. J. Chi, C. T. Russell, H. Y. Wei, V. Angelopoulos, and W. M. Farrell
Observations of Ion Cyclotron Waves at and near the Moon in the Magnetotail

XY500 EGU2012-210

J. Chela-Flores

Landing on the Moon's farside: What are the geochemistry, astrobiology and instrumental issues?

PS2.5/AS4.18 – Atmospheres of Terrestrial Planets (co-organized) – Posters

Convener: W.J. Markiewicz | Co-Conveners: E. Marcq, A. Määttänen

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY501 EGU2012-3232

T. G. Slanger, O. Kostko, D. A. Pejakovic, and K. S. Kalogerakis

GOAT (Global Oxygen And Temperature) Mapping

XY502 EGU2012-9813

S. Noll, W. Kausch, M. Barden, A.M. Jones, C. Szyszka, and S. Kimeswenger

An atmospheric radiation model for the Very Large Telescope at Cerro Paranal in Chile

XY503 EGU2012-2560

O. Kostko, S. Raj, K. M. Campbell, D. A. Pejakovic, T. G. Slanger, and **K. S. Kalogerakis**

O₂(b¹Σ^g+, v = 0, 1) Relative Yield in O(1D) + O₂ Energy Transfer

XY504 EGU2012-4241

J.W. Stock, C.S. Boxe, R. Lehmann, J.L. Grenfell, A.B.C. Patzer, H. Rauer, and Y.L. Yung

Photochemistry of the Martian atmosphere: Pathway analysis of ozone formation and destruction

XY505 EGU2012-6182

B. Shizgal, R. Sospedra-Alfonso, and A. Yau

Energetic Oxygen in the Terrestrial Exosphere

XY506 EGU2012-7818

A. Beth, A. Kotova, P. Garnier, D. Toublanc, I. Dandouras, P.C. Brandt, K. Dialynas, and S.M. Krimigis

Modeling the satellite particles in planetary exospheres: application to Titan, Earth and Mars

XY507 EGU2012-12495

S. Guslyakova, A. Fedorova, O. Korabiev, F. Lefevre, F. Montmessin, and J.-L. Bertaux

Oxygen dayglow observations on Mars by SPICAM IR

XY508 EGU2012-2554

K. S. Kalogerakis, J. Thiebaud, D. Matsiev, and R. A. Copeland

Laboratory Investigation of Relaxation Pathways for Vibrationally Excited OH

XY509 EGU2012-12628

F. Daerden, **L. Neary**, J. Whiteway, C. Dickinson, L. Komguem, J.C. McConnell, and J.W. Kaminski

Simulating the Phoenix Lander meteorological conditions with a Mars GCM

XY510 EGU2012-4940

O. Kemppinen, W. Schmidt, and A.-M. Harri

Analysis of the re-processed high-resolution whole-mission meteorological data of the Viking Landers

XY511 EGU2012-4830

C. Holstein-Rathlou, J.P. Merrison, C.F. Brædstrup, and P. Nornberg

The effects of electric fields on wind driven particulate detachment

XY512 EGU2012-418

Y. Willame, A.-C. Vandaele, C. Depiesse, D. Gillotay, S. Kochenova, and F. Montmessin

Preliminary results of aerosols' properties studied with EPF measurements from the SPICAM/UV instrument

XY513 EGU2012-10438

P. Machado, T. Widemann, D. Luz, J. Peralta, and D. L. Berry

New measurements of Venus winds with ground-based Doppler velocimetry at CFHT

XY514 EGU2012-600

J. R. Dias Pinto, J. L. Mitchell, and R. P. da Rocha

Momentum and heat transports in a superrotating atmosphere

XY515 EGU2012-10245

E. Marcq, F. Montmessin, J.L. Bertaux, D. Belyaev, and A. Fedorova

SO₂ monitoring above Venus' clouds using VEx/SPICAV-UV nadir observations

EMRP1.3/PS2.8 – Planetary and meteorite magnetism (co-organized) – Posters

Convener: J. Gattacceca | Co-Conveners: S.A. Gilder

Hall A | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Stuart Gilder

- A26 EGU2012-2598
M. Diaz-Michelena, D. Laughlin, and M. E. McHenry
Possible magnetic minerals constituents in the Martian crust and microstructures consistent with large remanent magnetizations
- A27 EGU2012-3086
M. Eitel, S. Gilder, and J. Pohl
Paleomagnetism of the Rochechouart Meteorite Impact Crater: Field Reversal or Self Reversal?
- A28 EGU2012-5190
S.A. Gilder, R. Egli, R. Hochleitner, S.C. Roud, M.W.R. Volk, M. Le Goff, and M. de Wit
A pressure-induced, magnetic transition in pyrrhotite: Implications for the formation pressure of meteorites and diamonds
- A29 EGU2012-5848
C. Milbury, G. Schubert, C. A. Raymond, S. E. Smrekar, and B. Langlais
Insight into Mars' Paleodynamo by Modeling Gravity and Magnetic Anomalies in the Southern Highlands
- A30 EGU2012-9373
J. Gattacceca, M. Gounelle, E. A. Lima, and B. P. Weiss
Paleomagnetic study of the Kaba meteorite
- A31 EGU2012-9740
C. Cournède, J. Gattacceca, B. Zanda, and P. Rochette
Magnetic study of CM chondrites
- A32 EGU2012-11211
S.C.L.L. Lappe, R.J. Harrison, and J.M. Feinberg
Rock magnetic properties of dusty olivine: a potential carrier of pre-accretionary remanence in unequilibrated ordinary chondrites
- A33 EGU2012-11395
N. S. Church, S. C. L. L. Lappe, T. Kasama, A. B. da Silva Fanta, R. E. Dunin-Borkowski, J. M. Feinberg, S. Russell, and R. J. Harrison
Crystallography and magnetic domain states of dusty olivine observed by electron holography: implications for recording of magnetic fields in the proto-planetary disc
- A34 EGU2012-11581
P. Rochette, J. Gattacceca, C. Cournède, and V. Sautter
Paleomagnetic and rock magnetic investigation of an exceptionally pristine sample from Mars
- A35 EGU2012-11774
J.A. Tarduno and R.D. Cottrell
Single Crystal Paleointensity Analyses of Olivine-Diogenites: Implications for a Past Vestan Magnetic Field

PS3.1 – Outer planet satellites with an atmosphere – Orals

Convener: A. Coustenis | Co-Conveners: S. K. Atreya, Ph.D. Orton, J.-P. Lebreton

Room: 28

Chairperson: Ch. Sotin

- 08:30–08:45 EGU2012-13152
R. D. Lorenz and A. G. Hayes
Recent Progress in Understanding Waves in Titan's Seas : Prospects for Cassini Observation
- 08:45–09:00 EGU2012-9832
J.I. Lunine and J. Castillo-Rogez
Models of a partially hydrated Titan interior with clathrate crust
- 09:00–09:15 EGU2012-13507
R.L. Kirk, E. Howington-Kraus, B. Redding, P.S. Callahan, A.G. Hayes, A. Le Gall, R.M.C. Lopes, R.D. Lorenz, A. Lucas, K.L. Mitchell, C.D. Neish, O. Aharonson, J. Radebaugh, B.W. Stiles, E.R. Stofan, S.D. Wall, and C.A. Wood
Topographic Mapping of Titan: Latest Results
- 09:15–09:30 EGU2012-534
A. Solomonidou, M. Hirtzig, E. Bratsolis, G. Bampasidis, A. Coustenis, K. Kyriakopoulos, S. Le Mouélic, K. Stephan, R. Jaumann, P. Drossart, C. Sotin, K. St. Seymour, and X. Moussas
Potentially active regions on Titan: New processing of Cassini/VIMS data
- 09:30–09:45 EGU2012-1284
M. Volwerk, X. Jia, C. Paranicas, W. S. Kurth, M. G. Kivelson, and K. K. Khurana
ULF waves in Ganymede's magnetosphere
- 09:45–10:00 EGU2012-4480
C. Plainaki, A. Milillo, A. Mura, S. Orsini, S. Massetti, and T. Cassidy
Generation of an exosphere around an icy moon: the case of Europa
- 10:00–10:15 EGU2012-12897
F. J. Crary, A. J. Coates, T. W. Hill, G. H. Jones, and R. L. Tokar
Ions and nanograin dust in the Enceladus plume: Cassini/CAPS high resolution energy spectra

COFFEE BREAK

Chairperson: J.-P. Lebreton

- 10:30–10:45 EGU2012-3103
S. K. Atreya, J.I. Lunine, A.A. Simon-Miller, D.H. Atkinson, W.B. Brinckerhoff, A. Coustenis, P.R. Mahaffy, T.R. Spilker, A. Colaprete, and K. Reh
 Formation of Saturn and Jupiter and their Atmospheres
- 10:45–11:00 EGU2012-10474
T. Cavalié, P. Hartogh, H. Feuchtgruber, E. Lellouch, C. Jarchow, R. Moreno, and G. Orton
 Observation of water in Saturn with Herschel: probing Saturn's 2011 storm
- 11:00–11:15 EGU2012-6996
K. K. Khurana
 Periodicities in Saturn's magnetosphere generated by an inner magnetospheric vortex
- 11:15–11:30 EGU2012-9932
P. Garnier, J.-E. Wahlund, M. Holmberg, A. Eriksson, S. Grimald, M. Morooka, G. Gustafsson, P. Schippers, D.A. Gurnett, S.M. Krimigis, N. Krupp, A. Coates, and F. Crary
 Mapping energetic electrons in the magnetosphere of Saturn with the Cassini RPWS Langmuir Probe
- 11:30–11:45 EGU2012-4412
N. Krupp, E. Roussos, C. Paranicas, D.G. Mitchell, S.M. Krimigis, and K.K. Khurana
 The magnetospheric interaction of Dione in the view of energetic particles: Cassini MIMI/LEMMS results during the encounters D1-D3
- 11:45–12:00 EGU2012-2011
L. Roth, J. Saur, P.D. Feldman, D.F. Strobel, and K.D. Retherford
 Variations of the UV emission from the atmosphere of the Jovian moon Io
- 12:00–12:15 EGU2012-3434
G. Orton, H. Feuchtgruber, L. Fletcher, E. Lellouch, R. Moreno, F. Billebaud, T. Cavalié, L. Decin, M. Dobrijevic, T. Encrenaz, P. Hartogh, C. Jarchow, L. M. Lara, and J. Liu
 Examining Rotational Variability in the Upper Tropospheres and Lower Stratospheres of Uranus and Neptune from Herschel PACS OT1 Observations: Implications for the Stability of Temperature and Compositional Structure

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. TenBarge, 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. Richterova, 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

PS6.1 – Exoplanets: formation, dynamics and processes – Posters

Convener: D. Winterhalter | Co-Conveners: L. Kaltenegger, J. Cho, A. Segura

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Lisa Kaltenegger

- XY516 EGU2012-1229
E. Belenkaya, I. Alexeev, and M. Khodachenko
 Discs around magnetized giant exoplanets and other astrophysical objects
- XY517 EGU2012-3662
M.W. Gold, J.J. Leitner, and M.G. Firneis
 Do Super-Earths Have Convective Cores?
- XY518 EGU2012-6992
Y. Matsumoto, M. Nagasawa, and S. Ida
 Critical Number of The Orbital Stability of Planets Trapped in First-Order Mean-Motion Resonances
- XY519 EGU2012-13433
C. Morel, E. Pantin, and C. Ferrari
 Characterization of exorings in the infrared
- XY520 EGU2012-1672
S. A. Cimorelli and C. Samuels
 Black Holes Categorization, along with the Space(s) they inhabit, to explain the Astro-Geophysical Processes
- XY521 EGU2012-1243
S. A. Cimorelli
 Explanations for Temperature Increases in the Northern and Southern Atlantic Ocean are Proposed
- XY522 EGU2012-1522
J.D. Burke and H.G.M. Hill
 Exoplanet Curriculum at the International Space University
- XY523 EGU2012-2428
Y. Miguel, L. Kaltenegger, B. Fegley Jr., and L. Schaefer
 Composition of Rocky Hot Super-Earth Atmospheres
- XY524 EGU2012-3487
L. Ksanfomality
 Signs of Life on Venus
- XY525 EGU2012-5962
I. P. Waldmann
 Analysing exoplanetary data using unsupervised machine-learning
- XY526 EGU2012-8313
B. Stracke, M. Godolt, J.L. Grenfell, P. von Paris, B. Patzer, and H. Rauer
 The Inner Boundary of the Habitable Zone: Loss Processes of Liquid Water from Terrestrial Planet Surfaces
- XY527 EGU2012-9201
L. Noack, F.W. Wagner, A.-C. Plesa, D. Höning, F. Sohl, D. Breuer, and H. Rauer
 Implications of (Less) Accurate Mass-Radius-Measurements for the Habitability of Extrasolar Terrestrial Planets: Why Do We Need PLATO?
- XY528 EGU2012-12406
E. Pilat-Lohinger, S. Eggl, and M. Gyergyovits
 On the Habitability of Planets in Binary Star Systems
- XY529 EGU2012-13720
N. Madhusudhan
 C/O Ratios in Exoplanetary Atmospheres
- XY530 EGU2012-13743
S. Hegde and L. Kaltenegger
 Colors of extreme exoEarth environments

Thursday, 26 April

GM2.1 – High definition topography - data acquisition, modelling, interpretation (co-listed) – Posters

Convener: D. Rieke-Zapp | Co-Conveners: A. Reiterer, J. Chandler, D. Vericat, N. Tate, D. M. Powell, J. Brasington, I. Marzoff

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: D. Vericat / N. Tate

- XL206 EGU2012-7714
A. Wagner, A. Reiterer, P. Wasmeier, **D. Rieke-Zapp**, and T. Wunderlich
Vision-Based Geo-Monitoring - A New Approach for an Automated System
- XL207 EGU2012-7858
R. Berther and D. Rieke-Zapp
Geomonitoring for understanding of sediment transport in an Alpine river catchment
- XL208 EGU2012-5566
A. Beer, L. Campana, and D. Rieke-Zapp
Evaluating sub-millimetre erosion monitoring in a mountain torrent
- XL209 EGU2012-14172
P. Marzahn, D. Rieke-Zapp, and R. Ludwig
Soil surface roughness characterization for microwave remote sensing applications
- XL210 EGU2012-4952
D. Rieke-Zapp
Insitu measurement of bedrock erosion
- XL211 EGU2012-12789
A. Volkwein, A. Beer, and L. Egli
Applications of terrestrial laser scanning in natural hazard sciences
- XL212 EGU2012-10565
M. Lo Brutto
Automatic reconstruction of 3D models in geomorphology through close-range photogrammetry and 3D web-based services
- XL213 EGU2012-5759
J. Gance, T. Dewez, J.-P. Malet, and A. Stumpf
Time-lapse stereo-photogrammetry to monitor electrical sounding electrodes on an unstable slope
- XL214 EGU2012-3537
H.K. Seo, Y.H. Noh, J.G. Um, Y.S. Choi, and M.H. Park
Applicability of digital photogrammetry technique to quantify rock fracture surfaces
- XL215 EGU2012-8167
F. Bretar, M. Pierrot-Deseilligny, D. Schelstraete, O. Martin, and P. Quernet
Generating High resolution surfaces from images: when photogrammetry and applied geophysics meets
- XL216 EGU2012-936
M. Westoby, J. Brasington, N.F. Glasser, M.J. Hambrey, and J.M. Reynolds
Structure-from-Motion photogrammetry: a novel, low-cost tool for geomorphological applications
- XL217 EGU2012-6261
C. Hugenholtz, K. Whitehead, B. Moorman, O. Brown, T. Hamilton, T. Barchyn, K. Riddell, and A. LeClair
High-resolution terrain and landcover mapping with a lightweight, semi-autonomous, remotely-piloted aircraft (RPA): a case study and accuracy assessment
- XL218 EGU2012-8822
C. Wiegand, C. Geitner, K. Heinrich, and M. Rutzinger
Multi-temporal analysis of aerial images for the investigation of spatial-temporal dynamics of shallow erosion - a case study from the Tyrolean Alps
- XL219 EGU2012-10016
C. Capanna, L. Jorda, G. Gesquière, and **P. Lamy**
A new 3D reconstruction technique applied to small solar system bodies
- XL220 EGU2012-9765
S. Delalieux, S. Livens, M. Goossens, I. Reusen, and **C. Tote**
Spatial unmixing for environmental impact monitoring of mining using UAS and WV-2
- XL221 EGU2012-8875
A Constantinescu, I. Nichersu, **C. Trifanov**, I. Nichersu, and M. Mierla
Morphometric analyze for flood hazard map using DTM built with LIDAR and Echo-sounder data in Danube Delta

- XL222 EGU2012-8905
M. Avian
First results of repeated Terrestrial Laserscanning monitoring processes at the rock fall area
Burgstall/Pasterze Glacier, Hohe Tauern Range, Central Austria
- XL223 EGU2012-10081
M. Avian
Performance and limits of different long-range TLS-sensors for monitoring high mountain geomorphic
processes at different spatial scales
- XL224 EGU2012-12400
A. Prokop and M. Chiari
Long term monitoring of geomorphological changes caused by torrent activity using terrestrial laser scanning
- XL225 EGU2012-10244
D.J. Luscombe, K. Anderson, A. Wetherelt, E. Grand-Clement, N. Le-Feuvre, D. Smith, and R.E. Brazier
Understanding the structure of Exmoor's peatland ecosystems using laser-scanning technologies
- XL226 EGU2012-10512
N. Perez-Gallego, T. Francke, J. Latron, S. Werth, S. Werb, and **F. Gallart**
Testing a Terrestrial Laser Scanner for studying badlands forms and erosion rates. Vallcebre (Catalan
Pre-Pyrenees)
- XL227 EGU2012-2469
M. Dotterweich and S. Bub
Using of high resolution morphometric thalweg analyses of dry valleys under woodland to assess land use
impact and soil erosion in the late Holocene
- XL228 EGU2012-13442
B.D. Collins, S.C. Corbett, and H.C. Fairley
Measuring and modeling high-resolution topographic change at archaeological sites in Grand Canyon National
Park, Arizona, U.S.A.
- XL229 EGU2012-731
Á. Gómez, S. Schnabel, F. Lavado, and J. Rubio
Developing a methodology to estimate historical sheet erosion rates using exposed roots and terrestrial laser
scanner
- XL230 EGU2012-5543
D. Vericat, M. Smith, J.A. López-Tarazón, A. Tena, J. Brasington, and R.J. Batalla
Monitoring Topographic Change In Highly Erodible Landscapes By Means Of Terrestrial Laser Scanning
- XL231 EGU2012-8691
M. Etchebes, P. Tapponnier, Y. Klinger, J. Van Der Woerd, X. Xu, S. Xinzhe, T. Xibin, M. Rizza, and T. Lok
Hang
Application of terrestrial LiDAR topographic data to reconstruct offset geomorphic markers along the Fuyun
strike-slip fault, Xinjiang, China
- XL232 EGU2012-1288
R.M. Frings and S. Vollmer
Use of 3D photogrammetry for measurement of river bed porosity
- XL233 EGU2012-4785
M. Smith and D. Vericat
Evaluating through-water terrestrial laser scanning under a range of flow and suspended sediment conditions

GM2.2 – Digital Landscapes: Quantitative Interrogation and Use to Examine Geomorphic Processes (co-listed) –

Posters

Convener: J. K. Hillier | Co-Conveners: P. Tarolli, P. Passalacqua, D.C. Mason, S. Conway

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Susan Conway

- XL234 EGU2012-4560
A.P. Valentine, L.M. Kalnins, and J. Trampert
Hunting for seamounts using neural networks: learning algorithms for geomorphic studies
- XL235 EGU2012-13482
VB Ernstsen, A. Lefebvre, J. Bartholdy, A. Bartholomä, and C. Winter
On the determination of net bedload transport patterns in a natural tidal inlet system (Knudedyb in the Danish
Wadden Sea)
- XL236 EGU2012-13310
F. Haas, **T. Heckmann**, L. Hilger, and M. Becht
Measuring debris flows in the proglacial area of the Gepatschferner/Austrian Alps using repeat ground-based
and airborne LiDAR data

- XL237 EGU2012-5046
J. K. Hillier and M. S. Smith
Robust 3D Quantification of Glacial Landforms: A Use of Idealised Drumlins in a Real DEM
- XL238 EGU2012-7660
L. Carturan, S. Calligaro, F. Cazorzi, G.A. Baldassi, D. Moro, A. Carton, G. Dalla Fontana, A. Guarnieri, N. Milan, and P. Tarolli
Mass balance and surface dynamics of Montasio Occidentale glacier (Eastern Italian Alps) investigated by Terrestrial Laser Scanner
- XL239 EGU2012-10137
A. J. Cook, T. Murray, A. Luckman, and D. G. Vaughan
A new 100-m Digital Elevation Model of the Antarctic Peninsula suitable for glacier morphology studies, using ASTER Global DEM
- XL240 EGU2012-9296
L. Rieg, R. Sailer, M. Sproß, M. Rutzinger, and V. Wichmann
Comparison of different DTM resolutions for surface change calculations in a high mountain environment
- XL241 EGU2012-8750
S. Trevisani, M. Cavalli, and L. Marchi
Reading alpine morphology according to surface texture: two approaches compared
- XL242 EGU2012-13565
J. B. Salisbury, J R. Arrowsmith, T. K. Rockwell, D. Haddad, O. Zielke, and C. Maddugo
The Climatic Role in Formation of Fault-Offset Geomorphic Features: Reliable Measurements for Slip-Per-Event Studies
- XL243 EGU2012-215
Yu. Yu. Yurchenko and S.V. Sokolov
Experience using of DEM's as a basis for landscapes classification at selection of geochemical methods of prospecting.
- XL244 EGU2012-8510
A. Doglioni and V. Simeone
Identification of large geomorphological anomalies based on 2D discrete wavelet transform
- XL245 EGU2012-3422
C. W. Lin, P. Tarolli, C. M. Tseng, and Y. H. Tseng
Recognition of large scale deep-seated landslides in vegetated areas of Taiwan
- XL246 EGU2012-5000
C.-M. Tseng, P. Tarolli, and C.-W. Lin
Variations of Geomorphic Signatures after a Major Typhoon
- XL247 EGU2012-5035
S. Calligaro, P. Tarolli, M. Mancini, A. Righetto, D. Capraro, G. Mei, and A. Spinazzè
Terrestrial Laser Scanner survey of a small headwater basin in the Dolomites
- XL248 EGU2012-6729
J.-K. Liu, M.-S. Yang, M.-C. Wu, and W.-C. Hsu
LiDAR DEM for Slope regulations of land development in Taiwan
- XL249 EGU2012-9407
L. Cavallari, M. Dierna, M. Gelmini, and **G. P. M. Vassena**
Multiresolution and multisensors 3D laser scanner survey of a landslide in the Italian Apls
- XL250 EGU2012-9865
P. Tarolli and A. Righetto
Regional scale analysis of the topographic signatures of landslide/debris flow dominated processes
- XL251 EGU2012-843
A. Tomczyk and M. Ewertowski
Digital Elevation Models of Differences (DODs): implementation for assessment of soil erosion on recreational trails.
- XL252 EGU2012-914
S. d'Oleire-Oltmanns, I. Marzolf, and L. Schrott
The use of very high resolution DSMs for the investigation of gully evolution in the Souss Basin, Morocco derived from UAV missions
- XL253 EGU2012-12427
J. H. Blöthe, H. Munack, and O. Korup
Sediment storage and stability along the western Tibetan plateau margin
- XL254 EGU2012-3184
F. Cazorzi, A. De Luca, A. Checchinato, F. Segna, and G. Dalla Fontana
A LiDAR based analysis of hydraulic hazard mapping
- XL255 EGU2012-4114
G. Sofia, P. Tarolli, and G. Dalla Fontana
LiDAR DTMs and anthropogenic feature extraction: testing the feasibility of geomorphometric parameters in floodplains

- XL256 EGU2012-4636
M. Della Seta, J.P. Galve, D. Piacentini, and F. Troiani
 Computation, validation and sensitivity of the DTM-derived geomorphic parameters: the case of Stream-Length Gradient Index
- XL257 EGU2012-5363
K. Fieber, I. Davenport, J. Ferryman, R. Gurney, J. Walker, and J. Hacker
 Analysis of full-waveform LiDAR pulse properties for vegetation discrimination and characterisation
- XL258 EGU2012-6172
F. Pirotti, A. Guarnieri, and A. Vettore
 Full waveform airborne laser scanning for mapping morphometric parameters in terrain with varying vegetation cover
- XL259 EGU2012-6345
J. Filski
 The State of Health of Nature Reserves: A Case Study using the Fusion of Hyperspectral and Lidar Data

GM2.3 – Geomorphological maps - indispensable tool in geomorphology (co-listed) – Orals

Convener: W. Schwanghart | Co-Conveners: JC Otto, T. Heckmann

Room: 2

Chairperson: Jan-Christoph Otto, Wolfgang Schwanghart

- 15:30–15:45 EGU2012-6114
A.C. Seijmonsbergen
 Current trends in geomorphological mapping
- 15:45–16:00 EGU2012-1763
J. Hjort
 Geomorphological mapping and analysis using statistically-based distribution modelling: advantages and pitfalls
- 16:00–16:15 EGU2012-7242
D. Loibl
 Detailed geomorphological mapping from high resolution DEM data (LiDAR, TanDEM-X): two case studies from Germany and SE Tibet
- 16:15–16:30 EGU2012-11305
T. Hoffmann and W. Schwanghart
 Geomorphic mapping using pixel-based slope-area plots
- 16:30–16:45 EGU2012-2765
 E. Vannamettee, L.V. Babel, **D. Karssenberg**, J. Schuur, M.R. Hendriks, and M.F.P. Bierkens
 Automated geomorphological mapping using Multiple Point Geostatistics
- 16:45–17:00 EGU2012-12585
M. Geilhausen and J.-C. Otto
 Smart "geomorphological" map browsing - a tale about geomorphological maps and the internet

GM2.3 – Geomorphological maps - indispensable tool in geomorphology (co-listed) – Posters

Convener: W. Schwanghart | Co-Conveners: JC Otto, T. Heckmann

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Tobias Heckmann

- XL260 EGU2012-3373
J. Jasiewicz and T.F. Stepinski
 Machine vision approach to auto-generation of high resolution, continental-scale geomorphometric map from DEM
- XL261 EGU2012-9171
H. Hikel, T. Jarmer, W. Schwanghart, N.J. Kuhn, Y. Yair, and M. Shoshani
 Geomorphological mapping in arid regions supported by the analysis of shrub patterns
- XL262 EGU2012-11966
E. Miccadei, T. Piacentini, and F. Daverio
 Morphotectonic mapping and Quaternary landscape evolution on the eastern Central Apennines and adriatic area (Italy)
- XL263 EGU2012-13363
 M. Thiel, **T. Heckmann**, and M. Becht
 Predictive Mapping of Sediment Cascades in Alpine Geosystems
- XL264 EGU2012-14233
 L. Hilger, **T. Heckmann**, F. Haas, and M. Becht
 Geomorphological mapping of the proglacial zone of the Gepatschferner glacier, Austria

- XL265 EGU2012-14388
J Goetz and JC Otto
 Adapted geomorphological mapping for sediment budget analysis - mapping focus and data base structure
- XL266 EGU2012-14396
G Prasicek and JC Otto
 Semi-automated mapping of geomorphological process domains - towards a geomorphological map of the European Alps
- XL267 EGU2012-14387
C Eisank and L Dragut
 An object-based approach to hierarchical classification of the Earth's topography from SRTM data
- XL268 EGU2012-7250
J.A. Stevenson, X. Sun, and N.C. Mitchell
 A feature-preserving denoising algorithm to improve the quality of geomorphic analysis
- XL269 EGU2012-3672
J. Alcalá, J.J. Zamorano, and D. Palacios
 Geomorphologic map and derived geomorphological evolution model of the Ampato volcanic complex (Southern Peru).
- XL270 EGU2012-3677
J. Alcalá, J.J. Zamorano, and D. Palacios
 Volcanic and glacial evolution of Chachani-Nocarane complex (Southern Peru) deduced from the geomorphologic map.
- XL271 EGU2012-14400
T. Strasser and C Eisank
 (Semi-)Automated landform mapping of the alpine valley Gradental (Austria) based on LiDAR data

ML0 – Commemoration Ceremony for Angioletta Coradini (Jean Dominique Cassini Medal) (co-listed) – Orals

Convener: A. Coustenis

Room: D

Chairperson: n.n.

12:15–13:15

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

GI2.3/PS1.3 – Space Instrumentation, Planetary landers and Rovers (co-organized) – Orals

Convener: M. Leese | Co-Conveners: P. Falkner, L. Richter, G. Kargl

Room: 41

Chairperson: Mark Leese

- 10:30–10:45 EGU2012-6385
R. D. Lorenz
 MP3 - A Meteorology and Physical Properties Package to explore Air:Sea interaction on Titan
- 10:45–11:00 EGU2012-5031
M. Knapmeyer, A. Akito, G. Bampasidis, W.B. Banerdt, A. Coustenis, M.J. Fouch, E.J. Garnero, O. Khavroshkin, N. Kobayashi, X. Moussas, W.T. Pike, K.J. Seidensticker, A. Solomonidou, H. Yu, and A. Zakharov
 Planetary Seismometers: An Overview
- 11:00–11:15 EGU2012-1403
N. Bost, F. Westall, C. Ramboz, and F. Foucher
 The International Space Analogue Rock Store (ISAR): A key tool for future planetary exploration.
- 11:15–11:30 EGU2012-7608
D. Devismes, P.-Y. Gillot, J.-C. Lefevre, E. Chassefière, and F. Chiavassa
 A New K-AR Development For In Situ Geochronology On The Surface Of Mars
- 11:30–11:45 EGU2012-5809
C. Pilorget, J.-P. Bibring, M. Berthe, and the MicrOmega team
 MicrOmega: an IR hyperspectral microscope to in-situ analyze planetary and small bodies samples, at their grain scale
- 11:45–12:00 EGU2012-11660
S. Barabash, M. Wieser, and P. Wurz
 Spectrometers for particle measurements in space based on surface reflection

GI2.3/PS1.3 – Space Instrumentation, Planetary landers and Rovers (co-organized) – Posters

Convener: M. Leese | Co-Conveners: P. Falkner, L. Richter, G. Kargl

Hall A | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Gunter Kargl

- A22 EGU2012-8073
H. Haukka, A.-M. Harri, S. Alexashkin, H. Guerrero, W. Schmidt, M. Genzer, and L. Vazquez
 Mars MetNet Mission Payload Overview
- A23 EGU2012-2058
 R. Sanz, **A. B. Fernandez**, J.A. Dominguez, B. Martin, and M. Díaz-Michelena
 Radiation test of AMR sensors for MetNet Mars Precursor Mission
- A24 EGU2012-4318
F. Foucher, G. López Reyes, N. Bost, F. Rull, P. Rüßmann, and F. Westall
 Effect of the crushing process on Raman analyses: consequences for the Mars 2018 mission
- A25 EGU2012-2925
 W. Macher, N. Kömle, **G. Kargl**, M. Bentley, and E. Kaufmann
 Study of the temperature evolution of a heated cylinder with mantle and consequences for spaceborne thermal conductivity sensors
- A26 EGU2012-9622
 E. Brageot, O. Groussin, **P. Lamy**, J.-L. Reynaud, and G. Fargant
 THERMAP: a mid-infrared spectro-imager based on an uncooled micro-bolometer for space missions to small bodies of the solar system
- A27 EGU2012-7271
P. Zhu, O. Karatekin, J.-P. Noel, M. van Ruymbeke, and V. Dehant
 A high-dynamic and accurate electromagnetic radiation and thermal energy detector for planetary studies
- A28 EGU2012-12577
M. Tulej, A. Riedo, S. Meyer, M. Iakovleva, M. Neuland, and P. Wurz
 A miniaturised laser ablation/ionisation analyser for investigation of elemental/isotopic composition with the sub-ppm detection sensitivity
- A29 EGU2012-10905
V. J. Scott, X. Amashukeli, P. H. Siegel, A. Fisher, Y. Bae, and R. Toda
 An RF-powered micro-extractor for the detection of astrobiological target molecules.
- A30 EGU2012-12800
C. Briois, L. Thirkell, A. Boukrara, J.P. Lebreton, R. Thissen, P. Puget, H. Cottin, N. Grand, C. Pennanech, P. Zapf, C. Szopa, N. Carrasco, C. Chapuis, A. Bouabdellah, J.J. Berthelier, C. Engrand, and A. Makarov
 A High Resolution Orbitrap Mass Spectrometer for In-Situ Analysis in Planetary Science
- A31 EGU2012-11041
M. Wieser, S. Barabash, M. Emanuelsson, K. Brinkfeldt, and P. Enoksson
 The PRIMA instrument onboard of the Swedish Prisma mission

- A32 EGU2012-3390
A. Cadu, P. Devoto, P. Louarn, and J.-A. Sauvaud
Development of grazing incidence devices for space-borne time of flight mass spectrometry
- A33 EGU2012-8859
R. Rispoli, E. De Angelis, L. Colasanti, N. Vertolli, S. Orsini, J. Scheer, A. Mura, A. Milillo, P. Wurz, S. Selci, A.M. Di Lellis, R. Leoni, M. D'Alessandro, F. Mattioli, and S. Cibella
ELENA MCP detector: absolute efficiency measurement for low energy neutral atoms
- A34 EGU2012-13806
J.-P. Lebreton
On the issue of surface contamination of a Langmuir Probe sensor: Demeter ISL results
- A35 EGU2012-8728
M. Sampl, Th. Oswald, H.O. Rucker, W. Macher, D. Plettemeier, and W.S. Kurth
The true properties of the Waves antennas onboard the Juno S/C
- A36 EGU2012-8449
H. Ishii, H. Kojima, H. Fukuhara, S. Okada, and H. Yamakawa
The development of the miniaturized waveform receiver with the function measuring Antenna Impedance in space plasmas
- A37 EGU2012-7223
H. Fukuhara, H. Kojima, H. Ishii, S. Okada, and H. Yamakawa
Development of Small Plasma Wave Receiver with a Dedicated Chip for Scientific Spacecraft

PS2.1 – Mercury – Posters

Convener: J. Benkhoff | Co-Conveners: U. Christensen

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL313 EGU2012-10358
J. Benkhoff
BepiColombo: Overview and latest updates
- XL314 EGU2012-3882
H. Hayakawa, H. Maejima and the BepiColombo MMO Project Team
BepiColombo MMO status update
- XL315 EGU2012-6120
V. Iafolla, D. Lucchesi, E. Fiorenza, C. Lefevre, M. Lucente, C. Magnafico, R. Peron, F. Santoli, S. Nozzoli, and A. Argada
The BepiColombo mission to Mercury: state of the art of the ISA accelerometer implementation onboard the Mercury Planetary Orbiter
- XL316 EGU2012-6010
V. Iafolla, **D. Lucchesi**, E. Fiorenza, M. Lucente, C. Lefevre, C. Magnafico, R. Peron, F. Santoli, S. Nozzoli, and A. Argada
The BepiColombo mission to Mercury: ISA accelerometer on-ground and in-flight calibration procedures
- XL317 EGU2012-4613
S. Orsini, S. Selci, A.M. Di Lellis, A. Mura, E. De Angelis, A. Milillo, R. Leoni, I. Dandouras, J. Scheer, P. Wurz and the SERENA/ELENA Team
The BepiColombo SERENA/ELENA sensor. Approaching final delivery: sensor description and recent results
- XL318 EGU2012-13702
S. Orsini, **E. De Angelis**, S. Selci, A.M. Di Lellis, R. Leoni, R. Rispoli, L. Colasanti, N. Vertolli, J. Scheer, A. Mura, A. Milillo, P. Wurz, M. D'Alessandro, D. Maschietti, F. Mattioli, S. Cibella, D. Brienza, and Compagnia Generale per lo Spazio
BepiColombo Serena/ELENA instrument: development and testing
- XL319 EGU2012-12075
J. Rodriguez-Ferreira, F. Poulet, P. Eng, Y. Longval, K. Dassas, A. Arondel, Y. Langevin, F. Capaccioni, G. Filacchione, P. Palumbo, G. Cremonese, and M. Dami
On-ground calibration of the BEPICOLOMBO/SIMBIO-SYS at instrument level
- XL320 EGU2012-8178
E. Richer, G. M. Chanteur, R. Modolo, F. Leblanc, and S. Hess
Solar Wind Interaction with Mercury's Magnetosphere: a Simulation Study
- XL321 EGU2012-9197
A. Mura, S. Orsini, A. Milillo, and V. Mangano
Time-evolving model for the exosphere of Mercury with rotating surface
- XL322 EGU2012-12940
V. Tenishev, X. Jia, M. Combi, J. Slavin, T. Zurbuchen, J. Raines, M. Rubin, and T. Gombosi
Coupled modeling of neutral and ionized sodium in the exosphere and magnetosphere of Mercury

- XL323 EGU2012-3194
S. A. Boardsen, B. J. Anderson, J. A. Slavin, J. M. Raines, H. Korth, D. Schriver, and S. C. Solomon
Coherent ULF waves in Mercury's nightside magnetosphere: Their source and impact
- XL324 EGU2012-14079
S. T. Lindsay, G. W. Fraser, A. Martindale, E.J. Bunce, and N.P. Bannister
Indirect Observations of Mercury's Magnetosphere by MESSENGER XRS
- XL325 EGU2012-9245
G. M. Chanteur, E. Richer, and R. Modolo
Mercury intrinsic magnetic field : Limits of the offset dipole representation
- XL326 EGU2012-7648
V. Mangano, A. Milillo, S. Orsini, A. Mura, S. Massetti, and F. Leblanc
Analysis of Sodium Anisotropies in the Exosphere of Mercury by July 2008 observations at THEMIS
- XL327 EGU2012-11130
G. Di Achille, C. Popa, M. Massironi, S. Ferrari, E. Mazzotta Epifani, M. Zusi, G. Cremonese, and P. Palumbo
Mercury's radius change estimates revisited using high incidence angle MESSENGER data
- XL328 EGU2012-3729
G. T. Weihs, J. J. Leitner, and M. G. Firneis
Comparison of Polygonal Impact Craters on Mercury and on other Terrestrial Planets
- XL329 EGU2012-9150
O. Wilkman, K. Muinonen, H. Parviainen, and J. Näränen
A simulated regolith medium for multi-wavelength studies
- XL330 EGU2012-9664
A. Coyette, T. Van Hoolst, and V. Dehant
Slichter modes of Mercury: period and possible observation

PS2.5/AS4.18 – Atmospheres of Terrestrial Planets (co-organized) – Orals

Convener: W.J. Markiewicz | Co-Conveners: E. Marcq, A. Määttänen

Room: 32

Chairperson: Wojciech J Markiewicz

- 13:30–13:45 EGU2012-829
S. Curry, M. Liemohn, X. Fang, and Y. Ma
Low energy ion loss at Mars
- 13:45–14:00 EGU2012-12666
M.-E. Gagné, J.-L. Bertaux, S.M.L. Melo, F. Montmessin, and K. Strong
Observations of the ultraviolet nitric oxide nightglow emission with SPICAM/MEx in the stellar occultation mode
- 14:00–14:15 EGU2012-12444
G. Gronoff, C. Simon Wedlund, C. J. Mertens, **M. Barthelemy**, and R. Lillis
Modeling and observation of the CO Cameron bands in the upper atmosphere of Mars
- 14:15–14:30 EGU2012-9800
B. Gondet, J.P. Bibring, and M. Vincendon
Monitoring the mesospheric CO₂ ice clouds by OMEGA/MEx
- 14:30–14:45 EGU2012-9003
A. Määttänen, C. Listowski, A. Reberac, B. Rougerie, L. Maltagliati, F. Lefèvre, J.-L. Bertaux, and F. Montmessin
Atmospheric profiles from the MEx/SPICAM solar occultations in the UV
- 14:45–15:00 EGU2012-13324
L. F. A. Teodoro, R. C. Elphic, J. L. Hollingsworth, R. M. Haberle, M. A. Kahre, V. R. Eke, T. L. Roush, G. A. Marzo, A. J. Brown, W. C. Feldman, and S. Maurice
Observational constraints of Polar Ice Deposits on Mars Atmospheric GCMs
- Chairperson: Anni Määttänen
- 15:30–15:45 EGU2012-12657
S. Rafkin and **A. Rothchild**
Methane and Energy Fluxes Above Titan's Lakes
- 15:45–16:00 EGU2012-3098
S. Chamberlain and J. Bailey
Water Vapour Abundance and Distribution in the Lower Venusian Atmosphere
- 16:00–16:15 EGU2012-5867
T. Encrenaz, T. K. Greathouse, H. Roe, J. H. Lacy, M. J. Richter, B. Bézard, T. Fouchet, and T. Widemann
Mapping of SO₂ and HDO on Venus using thermal infrared imaging spectroscopy

- 16:15–16:30 EGU2012-12398
D. Belyaev, O. Korabiev, A. Fedorova, J.-L. Bertaux, F. Montmessin, E. Marcq, A. Mahieux, and X. Zhang
 Sulfur oxides above Venus' clouds from SPICAV/SOIR VEX occultations
- 16:30–16:45 EGU2012-6455
D. Grassi, A. Migliorini, R. Politi, L. Montabone, G. Piccioni, and P. Drossart
 Time-series analysis of temperature profiles from VIRTIS Venus Express data
- 16:45–17:00 EGU2012-12994
S.S. Limaye, R.J. Krauss, N. Ignatiev, and W.J. Markiewicz
 Cloud-top altitude from limb views acquired by the Venus Monitoring Camera (VMC) on Venus Express
- 17:00–17:15 EGU2012-3049
W.J. Markiewicz, E. Petrova, O. Shalygina, M. Almeida, D.V. Titov, S.S Limaye, and N. Ignatiev
 Venus glory and the unknown uv absorber

GM10.1/PS2.9 – Planetary Geomorphology (co-organized) – Orals

Convener: S. Conway | Co-Conveners: M. Balme, C. Gallagher

Room: 22

Chairperson: Susan Conway

- 15:30–15:45 EGU2012-12381
J. Head, J. L. Dickson, J. S. Levy, D. M. H. Baker, and D. R. Marchant
 Antarctic Dry Valleys: Geological Processes in Hyperarid, Hypothermal Environments and Implications for Water on Mars
- 15:45–16:00 EGU2012-10722
E. Hauber, M. Ulrich, D. Reiss, H. Hiesinger, A. Johnsson, M. Balme, and C. Gallagher
 Reconstructing the recent climate of Mars: What can we learn from periglacial terrestrial analogues?
- 16:00–16:15 EGU2012-1045
G Jouannic, J Gargani, F Costard, C Marmo, F Schmidt, O Bourgeois, M Massé, and GG Ori
 Morphological characterization of springtime seasonal activity on the Russell dune (Mars)
- 16:15–16:30 EGU2012-532
M. Gourronc, O. Bourgeois, D. Mège, B. Bultel, and S. Pochat
 Valles Marineris: a past glaciated valley landsystem along the Martian equator
- 16:30–16:45 EGU2012-219
D. G. Blumberg, Y. August, and S.R. Rotman
 Measuring geomorphic stability and mobility; Interferometric coherence data as an indicator for aeolian (wind-blown) dune stability
- 16:45–17:00 EGU2012-11174
R. A. Craddock, Z. A. Needell, and T. R. Rose
 Characteristics Of Basaltic Sand: Size, Shape, And Composition As A Function Of Transport Process And Distance

GM10.1/PS2.9 – Planetary Geomorphology (co-organized) – Posters

Convener: S. Conway | Co-Conveners: M. Balme, C. Gallagher

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Matthew Balme

- XL297 EGU2012-285
A. Barrett, M.R. Balme, A. Hagermann, and M.R. Patel
 A Periglacial Landscape in Acidalia Planitia, Mars?
- XL298 EGU2012-1047
A. Séjourné, F. Costard, J. Gargani, and C. Marmo
 Formation and evolution of periglacial landforms in context of global warming: Comparison Earth-Mars
- XL299 EGU2012-1242
 R.J. Soare, **S.J. Conway**, and J.M. Dohm
 Putative crater-floor pingos, paleolakes and periglacial landscapes in north Utopia Planitia, Mars.
- XL300 EGU2012-9187
S.J. Conway, N. Mangold, M.R. Balme, and V. Ansan
 The Morphologic Difference between Crater Slopes with and without Gullies on Mars.
- XL301 EGU2012-11720
J. Gargani, G. Jouannic, F. Costard, G.G. Ori, C. Marmo, F. Schmidt, A. Lucas, and J. Busson
 How much liquid water was there on Martian dunes?

- XL302 EGU2012-5844
C. Gallagher and M.R. Balme
Evidence of stratabound liquefaction in the formation of fractured topographic margins, cone chains and pit catenas along the Martian Dichotomy Boundary and in Isidis Planitia, Mars.
- XL303 EGU2012-10062
M.R. Balme and C. Gallagher
Decametre scale, spiral-shaped landforms in Elysium Planitia, Mars
- XL304 EGU2012-325
D Baioni and M Sgavetti
Karst terrains in northern Sinus Meridiani, Mars.
- XL305 EGU2012-326
D Baioni, M Sgavetti, G Tampella, and F C Wezel
Lithostratigraphical analysis in northern Sinus Meridiani, Mars.
- XL306 EGU2012-10454
C. Quantin, N. Mangold, E. Haubert, J. Flahaut, L. Le Deit, F. Fueten, A Rossi, and H. Clenet
Age and erosion rates of sulfate-rich Interior Layered Deposits of Valles Marineris
- XL307 EGU2012-1890
D.W.T. Jackson, T. Smyth, and M. Bourke
Airflow modelling over aeolian bedforms, Proctor Crater, Mars
- XL308 EGU2012-3416
D. G. Blumberg
Radar observation of Venus' terrestrial analogues using TecSAR X-band SAR
- XL309 EGU2012-1505
N. Mangold, D. Baratoux, O. Arnalds, J.-M. Bardintzeff, B. Platevoet, M. Gregoire, and P. Pinet
Segregation of olivine grains in volcanic sands in Iceland and implications for mineralogy on Mars
- XL310 EGU2012-10075
Dm.V. Uchaev, V.A. Malinnikov, D.V. Uchaev, and J. Oberst
A Multifractal Approach to the Analysis of Size-Frequency Distributions of Craters on Planetary Bodies
- XL311 EGU2012-13584
B. Székely, P. Dorninger, Zs. Koma, J. Jansa, G. Kovács, and C. Nothegger
Feasibility analysis and residual evaluation of automated planar segmentation results of large-scale Martian surface structures
- XL312 EGU2012-4305
W Poole, J-P Muller, and S Gupta
On the calibration of Mars Orbiter Laser Altimeter surface roughness estimates using high-resolution DTMs

PS3.1 – Outer planet satellites with an atmosphere – Posters

Convener: A. Coustenis | Co-Conveners: S. K. Atreya, Ph.D. Orton, J.-P. Lebreton

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: S. Atreya and G. Orton

- XL331 EGU2012-2260
M. K. Dougherty, O. Grasset, C. Erd, D. Titov, E. J. Bunce, A. Coustenis, M. Blanc, A. J. Coates, P. Drossart, L. Fletcher, H. Hussmann, R. Jaumann, N. Krupp, O. Prieto-Ballesteros, P. Tortora, F. Tosi, and T Van Hoolst
JUJupiter ICy moons Explorer (JUICE): AN ESA L-CLASS MISSION CANDIDATE TO THE JUPITER SYSTEM
- XL332 EGU2012-6055
B. Bonfond, D. Grodent, **J.-C. Gérard**, T. Stallard, J. T. Clarke, M. Yoneda, A. Radioti, and J. Gustin
Expansion of the main auroral oval at Jupiter : evidence for Io's control over the Jovian magnetosphere
- XL333 EGU2012-9295
S Massetti, A. Milillo, A. Mura, S. Orsini, C. Plainaki, and V. Mangano
Plasma precipitation and neutral particle emission at Ganymede
- XL334 EGU2012-7864
G. Cessateur, J. Lilensten, M. Barthelemy, T. Dudok de Wit, C. Simon Wedlund, G. Gronoff, and M. Kretzschmar
Modelling the impact of the solar UV flux on Ganymede's atmosphere for constraining planetary missions: application to aeronomic emissions
- XL335 EGU2012-7752
A. Milillo, S. Orsini, C. Plainaki, E. DeAngelis, A. Argan, D. Fierro, N. Vertolli, I. Danduras, S. Selci, R. Leoni, J. Sheer and the The GENIE Team
Ganymede Europa Neutral Imaging Experiment at the Jupiter's icy moons
- XL336 EGU2012-10436
M. Seufert and J. Saur
Models for Callisto's Plasma Interaction: Implications for the satellite's Atmosphere and Interior

- XL337 EGU2012-8221
M. Yoneda, M. Kagitani, T. Miyata, and S. Okano
Ground-based observations of Io's volcanism and atmospheric escape
- XL338 EGU2012-3172
D.H. Atkinson, T.R. Spilker, J. Lunine, A. Simon-Miller, S.K. Atreya, W. Brinckerhoff, A. Colaprete, A. Coustenis, T. Guillot, P. Mahaffy, K. Reh, and L. Spilker
A Shallow Entry Probe Mission to Saturn
- XL339 EGU2012-8290
P. Kollmann, E. Roussos, N. Krupp, and C. Paranicas
Why do Saturn's energetic particle profiles look as they do?
- XL340 EGU2012-9625
M. Holmberg, J.-E. Wahlund, M. Morooka, and S. Sakai
Structure and dynamics of Saturn's inner magnetosphere - Cassini RPWS/LP observations
- XL341 EGU2012-12906
P. C. Brandt, D. G. Mitchell, D. A. Gurnett, A. M. Persoon, and N. A. Tsyganenko
Saturn's Periodic Magnetosphere: The Relation Between Periodic Hot Plasma Injections, a Rotating Partial Ring Current, Global Magnetic Field Distortions, Plasmopause Motion, and Radio Emissions
- XL342 EGU2012-8545
D J Andrews, S W H Cowley, M K Dougherty, L Lamy, G Provan, and D J Southwood
Planetary period oscillations in Saturn's magnetosphere: Evolution of magnetic oscillation properties from southern summer to post-equinox
- XL343 EGU2012-3765
N. Sergis, S. Krimigis, M. Thomsen, E. Roelof, D. Mitchell, D. Hamilton, N. Krupp, M. Dougherty, and F. Crary
Seven Years (2004-2011) of Cassini Measurements Reveal Strong Local Time Asymmetry of the Saturnian Ring Current
- XL344 EGU2012-11210
I. Nadezhdina, V. Patraty, L. Shishkina, D. Zhukov, A. Zubarev, I. Karachevtseva, and J. Oberst
Global shape estimates and GIS cartography of Io and Enceladus using new control point network
- XL345 EGU2012-12241
Y.-D. Jia, **C. T. Russell**, K. K. Khurana, and T. I. Gombosi
A multi-fluid MHD Model for the dusty plasma environment around Enceladus
- XL346 EGU2012-10231
M. Vincendon, S. Rodriguez, S. Le Mouélic, and P. Rannou
Titan VIMS local surface-atmosphere separation using multi-viewing angle observations
- XL347 EGU2012-6531
G. Bampasidis, **A. Coustenis**, R. K. Achterberg, D. E. Jennings, C. A. Nixon, S. Vinatier, P. Lavvas, R. Carlson, N. Teanby, F. M. Flasar, E. Guandique, and S. Stamogiorgos
Evolution of minor trace gases and isotopic ratios in Titan's stratosphere using CIRS/Cassini spectra
- XL348 EGU2012-5515
Z. Bebessi, K. Szego, N. Krupp, Z. Nemeth, G. Erdos, F.J. Crary, D.G. Mitchell, and S.M. Krimigis
On the structure of Titan's tail
- XL349 EGU2012-7614
B. Grieger
Shape from shading under Titan's sky
- XL350 EGU2012-8163
C. Alcaraz, J. Zabka, M. Polasek, and C. Romanzin
Anion Chemistry on Titan: A possible route to large N-bearing hydrocarbons
- XL351 EGU2012-11969
R.C. Ewing, **A.G. Hayes**, C. McCormick, C. Ballard, and S.A. Troy
Reorientation Timescales and Pattern Dynamics for Titan's Dunes: Does the Tail Wag the Dog or the Dragon?
- XL352 EGU2012-12352
M Hirtzig, B Bézard, A Coustenis, E Lellouch, P Drossart, C deBergh, A Campargue, V Boudon, V Tyuterev, P Rannou, T Cours, S Kassi, A Nikitin, L Wang, A Solomonidou, B Schmitt, and S Rodriguez
Titan's surface and atmosphere from Cassini/VIMS data with updated methane opacity
- XL353 EGU2012-13004
R.H. Brown, L.A. Soderblom, **C. Sotin**, J.W. Barnes, A.G. Hayes, K.J. Lawrence, S. Le Mouélic, S. Rodriguez, J.M. Soderblom, K.H. Baines, B.J. Buratti, R.N. Clark, R. Jaumann, P.D. Nicholson, and K. Stephan
Titan's lakes and Mare observed by the Visual and Infrared Mapping Spectrometer
- XL354 EGU2012-1424
Dr Helled
On the True Nature of Uranus and Neptune

PS4.1 – Comets, asteroids and dust (including David Bates Medal Lecture) – Orals

Convener: N. Altobelli | Co-Conveners: G. Schwehm

Room: 18

Chairperson: Nicolas Altobelli

13:30–14:30 EGU2012-14459

H. Rickman

Comets and the Young Solar System (David Bates Medal Lecture)

14:30–14:45 EGU2012-5520

M. Hilchenbach, H. Krüger, C. Briois, H. Cottin, J. Silen, and K. Varmuza

Cometary organic matter in view of future Rosetta/COSIMA analysis

14:45–15:00 EGU2012-10506

P. Lamy, I. Toth, L. Jorda, O. Groussin, G. Faury, and H. Weaver

Comet 8P/Tuttle: A portrait of a contact-binary nucleus from Hubble and Spitzer space telescopes observations

15:00–15:15 EGU2012-4718

M. A. Barucci, P. Michel, A. Cheng, H. Bönnhardt, J. R. Brucato, E. Dotto, P. Ehrenfreund, I.A. Franchi, S. F. Green, L.M. Lara, B. Marty, and D. Koschny

MarcoPolo-R: Near Earth Asteroid Sample Return Mission in ESA assessment study phase

Chairperson: Martin Hilchenbach

15:30–15:45 EGU2012-9633

A. Herique, J. Biele, P. Bousquet, V. Ciarletti, T.M. Ho, J.L. Issler, W. Kofman, P. Michel, D. Plettemeier, P. Puget, J.C. Souyris, S. Ulamec, T. van Zoest, and S. Zine

FANTINA: Fathom Asteroids Now: Tomography and Imagery of a NEA- Payload For Marco Polo R CV3 / ESA mission

15:45–16:00 EGU2012-3121

V. Carruba, M. Huaman, and S. Douvens

Chaotic diffusion caused by close encounters with more than one massive asteroid

16:00–16:15 EGU2012-4199

J.A. Sanchez, V. Reddy, A. Nathues, E. Cloutis, P. Mann, and H. Hiesinger

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

16:15–16:30 EGU2012-2878

S. Fornasier, E. Lellouch, T. Mueller, P. Panuzzo, P. Santos-Sanz, T. Lim, C. Kiss, E. Vilenius, J. Stansberry, A. Delsanti, F. Henry, H. Bönnhardt, A. Pal, R. Duffard, and A. Barucci

'TNOs are Cool: A survey of the trans-Neptunian region'. Results from the PACS and SPIRE observations with the Herschel Space Observatory

16:30–16:45 EGU2012-9750

J.-M. Petit, B. Gladman, and J. J. Kavelaars

Reality and origin of the Kernel of the classical Kuiper Belt

16:45–17:00 EGU2012-5227

M. Neuland, A. Riedo, S. Meyer, M. Iakovleva, M. Tulej, and P. Wurz

In Situ Composition Measurements of Minerals on Planetary Surfaces

17:00–17:15 EGU2012-13534

M. Horanyi, J. Szalay, and A. Poppe

Status of dust measurements by the Student Dust Counter

PS4.2 – Vesta science and exploration by Dawn – Orals

Convener: H. Hiesinger | Co-Conveners: S. Mottola, M. Toplis, E. Ammannito

Room: 32

Chairperson: Hiesinger/Mottola

08:30–08:45 EGU2012-2491

C. T. Russell, **C. A. Raymond**, R. Jaumann, and H. Y. McSween

Dawn Explores Vesta: Current Status, Future Plans

08:45–09:00 EGU2012-13074

C. A. Raymond, M. T. Zuber, A. S. Konopliv, S. W. Asmar, R. S. Park, D. E. Smith, F. Preusker, R. Jaumann, C.T. Russell, R. W. Gaskell, U. R. Christensen, A. Ermakov, A. Nathues, S. Mottola, P. Tricarico, and M. J. Toplis

Geophysical Observations of Vesta from Dawn

09:00–09:15 EGU2012-7544

R. Jaumann and the Dawn Geosciences Team

Vesta: A Geological Overview

- 09:15–09:30 EGU2012-8307
A. Nathues, L. LeCorre, V. Reddy, J. J. Li, B. Denevi, B. B. Buratti, H. H. Sierks, S.E. Schröder, C.M. Pieters, R. Gaskell, K.J. Becker, C.H. Hiesinger, P. Gutiérrez Marqués, and C.T. Russell
 The surface of Vesta in colors
- 09:30–09:45 EGU2012-10519
S.E. Schröder, J.-Y. Li, D.W. Mittlefehldt, C.M. Pieters, M.C. De Sanctis, H. Hiesinger, D.T. Blewett, C.T. Russell, C.A. Raymond, H.U. Keller, and A. Nathues
 Colors and photometry of bright materials on Vesta as seen by the Dawn Framing Camera
- 09:45–10:00 EGU2012-4876
M. C. De Sanctis, E. Ammannito, M.T. Capria, F. Capaccioni, F. Carraro, S. Fonte, A. Frigeri, G. Magni, S. Marchi, E. Palomba, F. Tosi, F. Zambon, T.B. McCord, L.A. McFadden, H. McSween, D.W. Mittlefehldt, C.M. Pieters, C.A. Raymond, and C.T. Russell
 Characterization of Mineralogy across Vesta
- 10:00–10:15 EGU2012-9544
E. Ammannito, M.C. De Sanctis, S. Fonte, G. Magni, F. Capaccioni, F. Tosi, M.T. Capria, D. Blewett, J.P. Combe, M. Farina, T. B. McCord, D.W. Mittlefehldt, E. Palomba, H. McSween, C. Pieters, J. Sunshine, T.N. Titus, M. Toplis, C.T. Russell, and C.A. Raymond
 Vesta and the HED meteorites: comparison of spectral properties

COFFEE BREAK

Chairperson: Toplis/Ammannito

- 10:30–10:45 EGU2012-7459
M. T. Capria, F. Tosi, F. Capaccioni, M. C. De Sanctis, E. Palomba, E. Ammannito, F. Carraro, S. Fonte, T. N. Titus, J. - P. Combe, M. Toplis, J. Sunshine, M. Fulchignoni, C. T. Russell, and C. A. Raymond
 Local thermal properties of the surface of Vesta
- 10:45–11:00 EGU2012-14344
 TH Prettyman, **MJ Toplis**, A Beck, WC Feldman, O Forni, SP Joy, DJ Lawrence, TJ McCoy, LA McFadden, HY McSween, DW Mittlefehldt, CA Polanskey, MD Rayman, CA Raymond, RC Reedy, CT Russell, and TN Titus
 Early Results for the Geochemistry of Vesta from Gamma Ray and Neutron Spectroscopy
- 11:00–11:15 EGU2012-6744
B. W. Denevi, D. T. Blewett, F. Capaccioni, M. C. De Sanctis, W. B. Garry, J. Y. Li, S. Marchi, T. J. McCoy, A. Nathues, N. E. Petro, C. A. Raymond, C. T. Russell, P. Schenk, J. E. C. Scully, J. M. Sunshine, D. A. Williams, and R. A. Yingst
 Observations of Marcia Crater from Dawn's Low-Altitude Mapping Orbit
- 11:15–11:30 EGU2012-10447
E. Palomba, J. Ph. Combe, T. B. McCord, M. C. De Sanctis, E. Ammanito, A. Longobardo, F. Tosi, F. Capaccioni, D. T. Blewett, R. Jaumann, H. McSween, C. A. Raymond, V. Reddy, D. Williams, and C. T. Russell
 Dark Material Deposits on Vesta: composition and mineralogy
- 11:30–11:45 EGU2012-6378
T.B. McCord, J-Ph. Combe, R. Jaumann, E. Palomba, V. Reddy, D.T. Blewett, H.Y. McSween, D.A. Williams, C.A. Raymond, C.T. Russell, and The Dawn Team
 Vesta Surface Dark Material Deposits from Dawn Observations: A Working Hypothesis for Origin and Processes
- 11:45–12:00 EGU2012-6613
S. Marchi, H.Y. McSween, D.P. O'Brien, P. Schenk, M.C. De Sanctis, R. Gaskell, H. Hiesinger, R. Jaumann, S. Mottola, F. Preusker, C.A. Raymond, T. Roatsch, C.T. Russell, and R.A. Yingst
 Vesta Collisional History Revealed by DAWN
- 12:00–12:15 EGU2012-9055
N. Schmedemann, T. Kneissl, G. Michael, G. Neukum, A. Nathues, H. Sierks, R. Wagner, K. Krohn, V. Reddy, H. Hiesinger, R. Jaumann, C. A. Raymond, and C. T. Russell
 Cratering on 4 Vesta - Comparison of Crater Retention Ages and Ar-Ar Ages of HED Meteorites.

PS4.2 – Vesta science and exploration by Dawn – Posters

Convener: H. Hiesinger | Co-Conveners: S. Mottola, M. Toplis, E. Ammannito

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Hiesinger/Mottola

- XL355 EGU2012-6225
R. A. Yingst, E. Ammannito, D. Berman, M. C. De Sanctis, F. Capaccioni, A. Frigeri, W. B. Garry, R. Jaumann, L. Le Corre, S. Mest, A. Nathues, E. Palomba, C. M. Pieters, F. Preusker, V. Reddy, T. Roatsch, C. T. Russell, D. A. Williams, F. Tosi, and F. Zambon
 A Global Geologic Map of Vesta Based on High-Altitude Mapping Orbit Data
- XL356 EGU2012-9122
O. Ruesch, H. Hiesinger, N. Schmedemann, T. Kneissl, D.T. Blewett, D.A. Williams, C.T. Russell, and C.A. Raymond
 Geologic mapping of the Av-2 Bellicia quadrangle of asteroid 4 Vesta
- XL357 EGU2012-11533
K. Stephan, A. Frigeri, M.A. Barucci, J. Sunshine, R. Jaumann, E. Palomba, D.T. Blewett, A. Yingst, S. Marchi, C.M. De Sanctis, K.-D. Matz, Th. Roatsch, F. Preusker, L. Le Corre, V. Reddy, C.T. Russell, and C.A. Raymond
 MINERALOGICAL MAPPING OF QUADRANGLE Av-2 (BELICIA) and Av-3 (CAPARRONIA) ON 4 VESTA.
- XL358 EGU2012-3701
D.T. Blewett, B.L. Young, D.A. Williams, D.P. O'Brien, R. Gaskell, R.A. Yingst, W.B. Garry, D.L. Buczkowski, H. Hiesinger, T.B. McCord, J-Ph Combe, P.M. Schenk, R. Jaumann, C.M. Pieters, A. Nathues, L. Le Corre, V. Reddy, M. De Sanctis, T. Roatsch, F. Preusker and the Dawn Science Team
 Geologic Mapping of the Av-3 Caparronia Quadrangle of Asteroid 4 Vesta
- XL359 EGU2012-3251
 J.E.C. Scully, **C.T. Russell**, A. Yin, D.A. Williams, D.T. Blewett, D.L. Buczkowski, E. Ammannito, T. Roatsch, F. Preusker, L. Le Corre, R.A. Yingst, W.B. Garry, R. Jaumann, C.M. Pieters, and C.A. Raymond
 Geologic Mapping of the Av-4 Domitia Quadrangle of Asteroid 4 Vesta
- XL360 EGU2012-6759
B. W. Denevi, R. Jaumann, A. Longobardo, M. J. Toplis, J. E. C. Scully, E. Ammannito, M. C. De Sanctis, F. Capaccioni, E. Polomba, F. Tosi, F. Zambon, A. Nathues, L. Le Corre, V. Reddy, K. Stephan, and F. Preusker
 Compositional Mapping of the Av-4 Domitia Quadrangle of Asteroid 4 Vesta
- XL361 EGU2012-5614
 D.A. Williams, **H. Hiesinger**, J.E.C. Scully, D.T. Blewett, D.L. Buczkowski, R. Jaumann, P.M. Schenk, R.A. Yingst, W.B. Garry, T. Roatsch, F. Preusker, C.M. Pieters, C.T. Russell, C.A. Raymond, and M.C. De Sanctis
 Geologic Mapping of the Av-5 Flronia Quadrangle of Asteroid 4 Vesta
- XL362 EGU2012-6462
J-Ph. Combe, M. Fulchinioni, T. B. McCord, E. Ammannito, M. C. De Sanctis, A. Nathues, F. Capaccioni, A. Frigeri, R. Jaumann, L. Le Corre, E. Palomba, F. Preusker, V. Reddy, K. Stephan, F. Tosi, F. Zambon, C. A. Raymond, and C. T. Russell
 Mineralogical Mapping of the Av-5 Flronia Quadrangle of Asteroid 4 Vesta
- XL363 EGU2012-8844
A. Nathues, L. Le Corre, V. Reddy, M. C. De Sanctis, D. A. Williams, W. B. Garry, R. A. Yingst, R. Jaumann, E. Ammannito, F. Capaccioni, F. Preusker, E. Palomba, T. Roatsch, F. Tosi, F. Zambon, C. M. Pieters, C. T. Russell, and C. A. Raymond
 Geologic and Mineralogic Mapping of Av-6 (Gegania) and Av-7 (Lucaria) Quadrangles of Asteroid 4 Vesta
- XL364 EGU2012-5686
 D.A. Williams, **H Hiesinger**, P.M. Schenk, R. Jaumann, D.L. Buczkowski, T.B. McCord, R.A. Yingst, W.B. Garry, J.-Ph. Combe, C.M. Pieters, A. Nathues, L. Le Corre, V. Reddy, T. Roatsch, F. Preusker, N. Schmedemann, G. Neukum, C.A. Raymond, E. Ammannito, and M.C. De Sanctis
 Geologic Mapping of the Av-8 Marcia Quadrangle of Asteroid 4 Vesta
- XL365 EGU2012-8584
F. Capaccioni, M.C. De Sanctis, A. Nathues, E. Ammannito, F. Tosi, F. Zambon, E. Palomba, A. Frigeri, L. Le Corre, V. Reddy, R. Jaumann, K. Stephan, F. Preusker, B. Denevi, and T. McCord
 Mineralogical Mapping of the Av-8 Marcia and Av-9 Numisia Quadrangles of Asteroid 4 Vesta
- XL366 EGU2012-5945
D. Buczkowski, D. Wyrick, F. Capaccioni, J. Scully, D. Williams, H. Hiesinger, W. Garry, R. Yingst, L. LeCorre, A. Nathues, P. Schenk, R. Jaumann, C. Raymond, C. Pieters, T. Roatsch, F. Preusker, and C. Russell
 Geologic Mapping of the Av-9 Numisia Quadrangle of Asteroid 4Vesta
- XL367 EGU2012-5711
W.B. Garry, M.V. Sykes, D.L. Buczkowski, D.A. Williams, R.A. Yingst, S.C. Mest, R. Jaumann, C.M. Pieters, H. Hiesinger, T. Roatsch, F. Preusker, C.T. Russell, and C.A. Raymond
 Geologic Mapping of Av-10 Oppia Quadrangle of Asteroid 4 Vesta
- XL368 EGU2012-7970
F. Tosi, E. Palmer, M.C. De Sanctis, A. Nathues, C. Pieters, E. Ammannito, F. Capaccioni, A. Frigeri, E. Palomba, F. Zambon, R. Jaumann, L. Le Corre, F. Preusker, K. Stephan, C.A. Raymond, V. Reddy, and C.T. Russell
 Compositional mapping of Vesta quadrangle Av-10

- XL369 EGU2012-13178
P. Schenk, **T. Hoogenboom**, D. Williams, R.A. Yingst, R. Jaumann, R. Gaskell, F. Preusker, A. Nathues, and T. Roatsch
Geologic Mapping of the Av-11 Pinaría Quadrangle of Asteroid 4 Vesta
- XL370 EGU2012-9228
L. McFadden, S. Marchi, **E. Ammannito**, A. Nathues, M. DeSanctis, F. Capaccioni, E. Palomba, F. Tosi, F. Zambone, L. LeCorre, V. Reddy, R. Jaumann, K. Stephan, F. Preusker, C. Raymond, and C. Russell
Mapping the mineralogical composition of the Pinaría region (Av-11) of Vesta
- XL371 EGU2012-8175
K. Krohn, R. Jaumann, K. Stephan, C.M. Pieters, R. Wagner, R.A. Yingst, D.A. Williams, P. Schenk, G. Neukum, N. Schmedemann, T. Kneissl, M.C. DeSanctis, A. Nathues, D.L. Buczowski, T. Roatsch, F. Preusker, E. Kersten, C.T. Russell, and C.A. Raymond
Geologic Mapping of the Av-12 Sextilia Quadrangle of Asteroid 4 Vesta
- XL372 EGU2012-12269
K. Stephan, R. Jaumann, F. Tosi, T. Titus, C.M. De Sanctis, K. Krohn, K.-D. Matz, T. Roatsch, F. Preusker, L. Le Corre, V. Reddy, C.T. Russell, and C.A. Raymond
MINERALOGICAL MAPPING OF QUADRANGLE Av-12 (SEXTILIA) ON 4 VESTA
- XL373 EGU2012-8239
T. Kneissl, N. Schmedemann, G. Neukum, D. A. Williams, W. B. Garry, R. A. Yingst, E. Ammannito, R. Jaumann, C. M. Pieters, C. T. Russell, C. A. Raymond, P. Schenk, H. Hiesinger, T. B. McCord, D. Buczowski, A. Nathues, V. Reddy, I. Büttner, K. Krohn, and F. Preusker
Geologic Mapping of the Av-13 Tuccia Quadrangle of Asteroid 4 Vesta
- XL374 EGU2012-6642
C. Pieters, M. C. De Sanctis, E. Ammannito, J. Y. Li, A. Nathues, T. Kneissl, R. Jaumann, V. Reddy, L. Le Corre, K. Stephan, F. Prusker, F. Capaccioni, E. Palomba, F. Tosi, F. Zambon, E. Palmer, C. A. Raymond, and C. T. Russell
Vesta Compositional Diversity in Quadrangle Av-13 Tuccia
- XL375 EGU2012-9611
S. C. Mest, R. A. Yingst, D. A. Williams, W. B. Garry, C. M. Pieters, R. Jaumann, D. L. Buczowski, M. V. Sykes, D. Y. Wyrick, P. M. Schenk, C. T. Russell, C. A. Raymond, G. Neukum, N. Schmedemann, T. Roatsch, F. Preusker, and E. Ammannito
Geologic Mapping of the Av-14 Urbina Quadrangle of Asteroid 4 Vesta
- XL376 EGU2012-6349
R. A. Yingst, E. Ammannito, D. Berman, M. C. De Sanctis, F. Capaccioni, A. Frigeri, R. Jaumann, L. Le Corre, S. Mest, E. Palomba, C. M. Pieters, F. Preusker, V. Reddy, T. Roatsch, C. T. Russell, P. M. Schenk, N. Schmedemann, D. A. Williams, F. Tosi, and F. Zambon
Geologic Mapping of the Av-15 Rheasilvia Quadrangle of Asteroid 4 Vesta
- XL377 EGU2012-8689
F. Zambon, A. Ammannito, B. Denevi, A. Frigeri, A. Yingst, M. C. De Sanctis, F. Capaccioni, E. Palomba, F. Tosi, M. T. Capria, F. Carraro, S. Fonte, G. Magni, S. Marchi, A. Nathues, L. Le Corre, V. Reddy, R. Jaumann, K. Stephan, and F. Preusker
Mineralogical mapping of quadrangles Av - 14 (Urbina) and Av - 15 (Rheasilvia) on 4 Vesta
- XL378 EGU2012-4979
M. C. De Sanctis, A. Nathues and the Dawn Mineralogy WG Team
Mapping the global mineralogical composition of Vesta
- XL379 EGU2012-4895
A. Frigeri, M. C. De Sanctis, E. Ammannito, R. A. Yingst, S. Mest, B. Garry, G. Magni, E. Palomba, N. Petro, F. Tosi, D. Williams, F. Zambon, R. Jaumann, C. M. Pieters, C. A. Raymond, and C. T. Russell
Insights from the correlation of the preliminary Geologic and Mineralogic maps of Vesta from the Dawn mission data
- XL380 EGU2012-10814
E. Palomba, M. C. De Sanctis, E. Ammannito, F. Capaccioni, M. T. Capria, M. Farina, A. Frigeri, A. Longobardo, F. Tosi, F. Zambon, H. Y. McSween, D. W. Mittlefehldt, C. T. Russell, C. A. Raymond, J. Sunshine, and T.B. McCord
Search for olivine spectral signatures on the surface of Vesta
- XL381 EGU2012-8176
S.E. Schröder, F. Capaccioni, S. Mottola, Y.-J. Li, M.T. Capria, M. Hoffmann, H.U. Keller, and A. Nathues
Vesta Phase Reddening as seen by Dawn
- XL382 EGU2012-6949
T. Roatsch, E. Kersten, K.-D. Matz, F. Preusker, F. Scholten, R. Jaumann, C. A. Raymond, and C. T. Russell
High resolution Vesta HAMO atlas derived from Dawn FC images.
- XL383 EGU2012-5530
M. Hoffmann, A. Nathues, J. B. Vincent, H. Sierks and the Dawn Team
Unique crater morphologies on Vesta, and the context of a deep regolith and intermediate gravity

- XL384 EGU2012-7634
R. Jaumann, K. Krohn, T.B. McCord, D.A. Williams, C.A. Raymond, D.T. Blewett, H. Hiesinger, R.A. Yingst, H.Y. McSween, B.W. Denevi, E. Palomba, T. Roatsch, and K. Stephan
 Investigating the Origin of Dark Material on Vesta: Locations and Geological Context
- XL385 EGU2012-8751
H. Hiesinger, O. Ruesch, R. Jaumann, A. Nathues, C. A. Raymond, and C. T. Russell
 Smooth pond-like deposits on asteroid 4 Vesta: First results from the Dawn mission.
- XL386 EGU2012-11805
F. Preusker, F. Scholten, K.-D. Matz, T. Roatsch, R. Jaumann, C. A. Raymond, and C. T. Russell
 Topography of asteroid (4) Vesta from Dawn FC HAMO stereo images
- XL387 EGU2012-8108
F. Tosi, M.T. Capria, M.C. De Sanctis, E. Palomba, D. Grassi, F. Capaccioni, E. Ammannito, J.-Ph. Combe, J.M. Sunshine, T.B. McCord, J.-Y. Li, T.N. Titus, C.T. Russell, C.A. Raymond, D.W. Mittlefehldt, M.J. Toplis, O. Forni, and M.V. Sykes
 Thermal behaviour of unusual local-scale surface features on Vesta
- XL388 EGU2012-8555
M. Formisano, C. Federico, D. Turrini, and F. Capaccioni
 Modelling the thermal history of Vesta: time scale of accretion and differentiation.
- XL389 EGU2012-13272
M.J. Toplis, H. Mizzon, O. Forni, M. Monnereau, J.A. Barrat, T.H. Prettyman, H.Y. McSween, T.J. McCoy, D.W. Mittlefehldt, M.C. De Sanctis, C.A. Raymond, and C.T. Russell
 Chondritic models of 4 Vesta: Comparison of data from the Dawn mission with predicted internal structure and surface composition/mineralogy.
- XL390 EGU2012-13350
H. Mizzon, M. Monnereau, M.J. Toplis, J.A. Barrat, and O. Forni
 Re-melting of Vesta's crust with 26Al?
- XL391 EGU2012-6819
D. Maravilla, J. Arenas, K. E. Cervantes-de la Cruz, and J. Cañetas
 On the features of the Tatahouine meteorite

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

PS8.1 – Planetary Evolution and Life – Posters

Convener: T. Spohn | Co-Conveners: L. Noack, D. Breuer, H. Lammer, A.F. Chicarro, F. Westall, J. L. Vago, M. Chaussidon, F. Raulin, O. Prieto-Ballesteros

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: L. Noack

- XL392 EGU2012-1275
Y. Khachay, V. Anfilogov, and **A. Antipin**
About the Influence of the initial Atmosphere on the Earth's Temperature Distribution during it's Accumulation
- XL393 EGU2012-8941
N. Virgo, E. Simoncini, and A. Kleidon
The thermodynamic drivers of atmospheric chemical disequilibrium and their relationship to habitability
- XL394 EGU2012-8586
F. Gans, N. Virgo, and A. Kleidon
Thermodynamic constraints on photosynthesis in different extraterrestrial environments
- XL395 EGU2012-9334
E. Simoncini, A. Kleidon, N. Virgo, L. Grenfell, S. Gebauer, and H. Rauer
A first evaluation of the drivers of chemical disequilibrium within the Earth's atmosphere with an atmospheric chemistry model
- XL396 EGU2012-5574
M. Kunze, M. Godolt, U. Langematz, and H. Rauer
Investigating the Faint young Sun problem with a general circulation model
- XL397 EGU2012-1964
F. Cresto Aleina, M. Baudena, F. D'Andrea, and A. Provenzale
Terraforming planet Dune: Climate-vegetation interactions on a sandy planet
- XL398 EGU2012-13427
I. Gomez Leal
Photometric variability of the disk-integrated thermal emission of terrestrial planets
- XL399 EGU2012-11168
M. Vasquez, **F. Schreier**, D. Kitzmann, B. Patzer, H. Rauer, S. Gimeno Garcia, and T. Trautmann
Effects of Clouds on High Resolution Thermal Emission Spectra of Terrestrial Exo-Planets
- XL400 EGU2012-5713
C. Gillmann and P. Tackley
Mantle dynamics and the atmospheres of Mars and Venus: implications for surface conditions and interactions.
- XL401 EGU2012-14374
D. Höning and T. Spohn
The limiting factors on volcanism on massive stagnant lid planets
- XL402 EGU2012-9406
L. Noack and D. Breuer
On the Problem of Deriving Scaling Laws for Plate-Tectonics on Terrestrial-Like Exoplanets
- XL403 EGU2012-3491
A. van den Berg, D. Yuen, K. Umemoto, R. Wentzcovitch, and M. Jacobs
Realistic thermal evolution models for Superearth Exo-solar planets
- XL404 EGU2012-6579
P. Tackley, M. Ammann, J. P. Brodholt, D. P. Dobson, and D. Valencia
Mantle Dynamics in Super-Earths: Post-Perovskite Rheology and Self-Regulation of Viscosity
- XL405 EGU2012-9177
C. Stein, J.P. Lowman, and U. Hansen
The effect of mantle internal heating and pressure-weakening on surface dynamics: implications for Super-Earths
- XL406 EGU2012-9481
A. Moeller and U. Hansen
Influence of rotation on the 'Iron Rain' in a Hadean magma ocean
- XL407 EGU2012-6329
H. Hansen-Goos, J. S. Wettlaufer, and D. T. F. Möhlmann
Cryobrines on Mars: latitudinal distribution and enhancement through premelting
- XL408 EGU2012-8684
J. Raack, D. Reiss, O. Ruesch, and H. Hiesinger
Present Day Activity of South Polar Gullies on Mars
- XL409 EGU2012-1405
V. Dehant, M. Yseboodt, M. Mitrovic, and L. Iess
Geodesy with landers for obtaining information on the interior of Mars

IG9/GMPV2.2/PS9.2 – New advances in non-traditional isotope chemistry, thermochronometry and $^{40}\text{Ar}/^{39}\text{Ar}$ dating (co-organized) – Orals

Convener: R. W. Brown | Co-Conveners: S. Nomade, F. Jourdan, O. Rouxel, C. Siebert, R. Beucher, A. Carter, D. Mark, F. Stuart

Room: 42

Chairperson: Fred Jourdan

- 08:30–08:45 EGU2012-13366
F.M. Stuart and D. Mark
Constraints on Earth degassing history from the argon isotope composition of Devonian atmosphere
- 08:45–09:00 EGU2012-10904
S. P. Kelley and S. Flude
Observation of micron to centimetre scale argon in alkali feldspars: implications for $^{40}\text{Ar}/^{39}\text{Ar}$ thermochronology
- 09:00–09:15 EGU2012-6858
F. Jourdan, E. Thern, S.A Wilde, and L. Frewer
 $^{40}\text{Ar}/^{39}\text{Ar}$ dating of unusual minerals (tourmaline, K-richterite, yimengite, wadeite and priderite) and applicability to the geological record.
- 09:15–09:30 EGU2012-5144
K. de Jong
Does numerical modelling of apparent partial loss Ar/Ar age spectra of hornblende give the correct thermal history of terranes? Insights from the Palaeoproterozoic Lapland-Kola orogen (Russia)
- 09:30–09:45 EGU2012-8298
R. Schoenberg, I.C. Kleinhanns, M. van Zuilen, V.A. Melezhik, and R.B. Pedersen
Applicability of stable Cr isotope variations in marine sediments for the reconstruction of environmental changes through the geologic record
- 09:45–10:00 EGU2012-10481
T.J. Horner, R.B.Y. Lee, G.M. Henderson, and R.E.M. Rickaby
A novel methodology to investigate isotopic biosignatures

COFFEE BREAK

Chairperson: Olivier Rouxel

- 10:30–10:45 EGU2012-13020
V. Dekov and O. Rouxel
Cu- and Zn-isotope systematics of seafloor hydrothermal vent fluids from a back-arc setting (Manus Basin)
- 10:45–11:00 EGU2012-9699
M. Tanimizu and K. Nagaishi
High precision $^{11}\text{B}/^{10}\text{B}$ analysis with a simplified MC-ICP-MS
- 11:00–11:15 EGU2012-5757
P. Vermeesch and A. Carter
A simple method for in-situ zircon U-Th-He dating
- 11:15–11:30 EGU2012-11828
R. W. Brown, R. Beucher, S. Roper, K. Gallagher, C. Persano, and F. Stuart
How to derive robust thermal histories from 'over-dispersed' single crystal apatite (U-Th)/He ages
- 11:30–11:45 EGU2012-12199
R. Beucher, R.W. Brown, K. Dobson, C. Persano, F. Stuart, and F. Roelofse
Apatite Fission Track and (U-Th)/He data from deep boreholes and regional transects in South Africa: implications for the exhumation pattern and uplift of the southern African plateau
- 11:45–12:00 EGU2012-10225
R.L. Reverman, M.G. Fellin, F. Herman, and S.D. Willett
Miocene to Pleistocene Exhumation of the Southern European Alps

IG9/GMPV2.2/PS9.2 – New advances in non-traditional isotope chemistry, thermochronometry and $^{40}\text{Ar}/^{39}\text{Ar}$ dating (co-organized) – Posters

Convener: R. W. Brown | Co-Conveners: S. Nomade, F. Jourdan, O. Rouxel, C. Siebert, R. Beucher, A. Carter, D. Mark, F. Stuart

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Cristina Persano

- A253 EGU2012-2628
F. L. Schenker, M. Forster, and J.-P. Burg
The Eastern Pelagonian metamorphic core complex: insight from the $^{40}\text{Ar}/^{39}\text{Ar}$ dating of white micas
- A254 EGU2012-5231
K. de Jong, G. Ruffet, and M. Marker
 Ar/Ar age data of muscovite from the Keivy Terrane (central Kola Peninsula, arctic European Russia) imply a prolonged fluid-assisted recrystallisation

- A255 EGU2012-5409
K. de Jong, B. Wang, G. Ruffet, L.S. Shu, and M. Faure
Ar/Ar geochronology in the western Tianshan (northwestern China): from Carboniferous (ultra)high-pressure metamorphism and thrusting to Permian strike-slip deformation and fluid ingress
- A256 EGU2012-8162
C.J. Warren, S.P. Kelley, S.C. Sherlock, and C.S. McDonald
40Ar/39Ar systematics in an exhumed ultra-high pressure terrane: implications for the timing of exhumation
- A257 EGU2012-12062
A.J. Smye, **C.J. Warren**, and M.J. Bickle
Excess 40Ar as a tracer for metamorphic porosity
- A258 EGU2012-1192
D.M. Chew and R.A. Donelick
Combined apatite fission track and U-Pb dating by LA-ICPMS
- A259 EGU2012-3220
R. Vocke, S. Rabb, and J. Mann
Value Assignment of Isotopic Reference Materials - Approaches, Pitfalls and Workarounds based on Experiences from the Avogadro Project
- A260 EGU2012-3676
E. Enkelmann and T. A. Ehlers
Advantages and challenges in automated apatite fission track counting
- A261 EGU2012-4056
H. C. Chao, C. F. You, H. C. Liu, and C. -H Chung
The Origin and Post Processes of Mud Volcano Fluids in Taiwan: Evidence from Hydrogen, Oxygen, and Strontium Isotopic Compositions (δD , $\delta^{18}O$, $87Sr/86Sr$, $87Sr/86Sr^*$, and $\delta^{88}/86Sr$)
- A262 EGU2012-5860
N. Cogné, K. Gallagher, and P.R. Cobbold
Coupled inverse and forward modelling to assess the range of acceptable thermal histories, a case study from SE Brazil
- A263 EGU2012-6213
S. Mansour, N. Hasebe, F. I. Khalaf, M. K. El-Shafei, S. Arai, and A. Tamoura
LA-ICP-MS Zircon U-Pb Geochronology of the Neoproterozoic Basement Complex of Wadi Baba Area, West-Central Sinai, Egypt; Implications to understand the Evolution of the Arabian-Nubian Shield
- A264 EGU2012-10520
A. Voinot, M-P. Turpault, F. Chabaux, and D. Lemarchand
Mechanisms of primary mineral weathering inferred from B isotopes
- A265 EGU2012-11607
M. Konrad-Schmolke and M. Sudo
Correlation of in situ measured Ar, Li and B concentrations and isotopic compositions in fluid- and deformation-induced partially recrystallised high pressure rocks
- A266 EGU2012-11745
C. Siebert, N. Greber, T. Naegler, and T. Pettke
Towards an International Molybdenum Standard: NIST Standard Reference Materials 610, 612 and 3134
- A267 EGU2012-11274
M. Wildman, R. Beucher, R. Brown, C. Persano, F. Stuart, and F. Roelofse
The morphotectonic history of the Atlantic continental margin of South Africa: insights from combined (U-Th)/He and fission track thermochronometry
- A268 EGU2012-14487
R. Cochrane, R. Spikings, D. Chew, and J. Wotzlav
Apatite U-Pb Thermochronology: A combined ID-TIMS and LA-ICP-MS study from southern Ecuador
- A269 EGU2012-10017
K. Stübner, L. Ratschbacher, D. M. Whipp Jr., R. Jonckheere, and I. Dunkl
Exhumation of the Shaxdara gneiss dome, Pamir Mts.: tectonics versus erosion
- A270 EGU2012-6414
O.V. Yakubovich, Yu.A. Shukolyukov, A.G. Mochalov, A.B. Kotov, and S.I. Korneev
Anomalously high retention of radiogenic helium in native platinum
- A271 EGU2012-10637
T. Schaffhauser, F. Chabaux, B. Fritz, B. Ambroise, A. Clement, and Y. Lucas
Geochemical tracing and modeling of alteration processes in the Ringelbach granitic research catchment (Vosges, France)
- A272 EGU2012-12942
O. Rouxel, A. Bekker, Y. Germain, and E. Ponzevera
Spatially resolved Fe- and S-isotope composition of sedimentary pyrite

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: M. Diez

- XY684 EGU2012-3112
E. Leonardis, **S. C. Chapman**, R. Nicol, and C. Foullon
Generalized similarity in finite range turbulence in in-situ temporal, and line-of-sight spatial observations.
- XY685 EGU2012-3407
P.-L. Sulem, T. Passot, and D. Laveder
Temporal intermittency of Alfvénic turbulence dissipation: effect of intermediate shock instabilities
- XY686 EGU2012-5210
N. Bakas
Stability of a compressible shear flow
- XY687 EGU2012-8711
A.S. Lipatov, E.C. Sittler Jr., R.E. Hartle, and J.F. Copper
Effects of "shot" noise on excitation of the small-scale electromagnetic fluctuations in the inner heliosphere: hybrid modeling
- XY688 EGU2012-10961
D. Burgess, C. Haynes, and E. Camporeale
Simulations of turbulent relaxation in solar wind plasma and the role of reconnection
- XY689 EGU2012-11282
H. Hietala, K. Andréevová, R. Vainio, and H. E. J. Koskinen
On foreshock dynamics in shock-shock interaction
- XY690 EGU2012-12168
A. Balogh and S. Perri
Observations of the balance between Alfvénic fluctuations and convected magnetic structures in different solar wind regimes
- XY691 EGU2012-13231
P. Kovács, G. Vadász, and B. Heilig
Intermittent plasma fluctuation in the terrestrial foreshock
- XY692 EGU2012-14013
A.M. Matulka, P.L. Gonzalez-Nieto, J.M. Redondo, and A.M. Tarquis
Velocity and Vorticity Fields of a Turbulent Plume under different experimental conditions

Friday, 27 April

GM2.1 – High definition topography - data acquisition, modelling, interpretation (co-listed) – Orals

Convener: D. Rieke-Zapp | Co-Conveners: A. Reiterer, J. Chandler, D. Vericat, N. Tate, D. M. Powell, J. Brasington, I. Marzloff

Room: 22

Chairperson: J. Brasington

- 08:30–08:45 EGU2012-10924
S. Van-Wier and P. Bernatchez
Use of a mobile terrestrial laser system to quantify the impact of rigid coastal protective structures on sandy beaches, Quebec, Canada
- 08:45–09:00 EGU2012-2730
D. M. Powell and D. Ackerley
Characterising the roughness properties of alluvial river banks using terrestrial laser scanning.
- 09:00–09:15 EGU2012-8878
J.M. Nield, G.F.S. Wiggs, J. Leyland, S.E. Darby, J. King, F.D. Eckardt, R.C. Chiverrell, L.H. Vircavs, and B. Jacobs
Quantifying small-scale temporal surface change on glaciers and salt pans using terrestrial laser scanning: implications for modelling ablation and dust emission
- 09:15–09:30 EGU2012-11944
C. Fey, C. Zangerl, F. Haas, M. Rutzinger, R. Sailer, and M. Bremer
Rock slide deformation measurements with Terrestrial Laser Scanning in inaccessible high mountain areas
- 09:30–09:45 EGU2012-12284
H. Croft
Soil surface microtopography from close-range laser data and hyperspectral directional reflectance factors
- 09:45–10:00 EGU2012-13139
S. Filin, R. Arav, A. Mushkin, and O. Katz
Monitoring coastal-cliff erosion processes using a novel change detection methodology for high-resolution terrestrial laser scanner data

COFFEE BREAK

Chairperson: D. Rieke-Zapp

- 10:30–10:45 EGU2012-4368
N. Brodu and **D. Lague**
3D point cloud classification of complex natural scenes using a multi-scale dimensionality criterion: applications in geomorphology
- 10:45–11:00 EGU2012-10317
C. Castagnetti, E. Bertacchini, A. Capra, and A. Corsini
Critical aspects of integrated monitoring systems for landslides risk management: strategies for a reliable approach
- 11:00–11:15 EGU2012-3775
J. Müller, I. Gärtner-Roer, G. Menz, C. Ginzler, and P. Thee
How accurate can we be? - An evaluation of airborne digital elevation models in a high mountain environment
- 11:15–11:30 EGU2012-911
S. d'Oleire-Oltmanns and I. Marzloff
UAV derived data for the monitoring of gully erosion in the Souss Basin, Morocco
- 11:30–11:45 EGU2012-12606
P. Allemand, C. Delacourt, A. Deschamps, A. Quiquerez, P. Grandjean, J. Ammann, G. Ori, F. Cannarsa, R. Sabbadini, I. Dell'Archiprete, and D. Gasperini
Drelia : an photogrammetric UAV for geomorphology
- 11:45–12:00 EGU2012-4550
M. R. James and S. Robson
The accuracy of photo-based structure-from-motion DEMs

GM2.2 – Digital Landscapes: Quantitative Interrogation and Use to Examine Geomorphic Processes (co-listed) –

Orals

Convener: J. K. Hillier | Co-Conveners: P. Tarolli, P. Passalacqua, D.C. Mason, S. Conway

Room: 22

Chairperson: Paolo Tarolli

- 13:30–13:45 EGU2012-13881
A. B. Watts and the SONNE 215 Shipboard Scientific Party
 Repeat swath bathymetry surveys and the rates of growth and collapse of active submarine volcanoes
- 13:45–14:00 EGU2012-6079
Q. Li and S. Dehler
 Identify Foot of Continental Slope by singular spectrum and fractal singularity analysis
- 14:00–14:15 EGU2012-10599
M. D. Hurst, S. M. Mudd, and M. Attal
 Hysteresis in transient landscape topography recorded by hillslopes.
- 14:15–14:30 EGU2012-7207
G. Bertoldi, M. Reginato, and V. D'Agostino
 Merging field survey and LiDAR technology for the analysis of debris-flow erosion
- 14:30–14:45 EGU2012-9898
R. Bell and H. Petschko
 Landslide persistence and human impact in Lower Austria assessed by lidar data and aerial photography
- 14:45–15:00 EGU2012-10318
R. Rivola, E. Bertacchini, C. Castagnetti, A. Capra, A. Corsini, F. Ronchetti, and F. Bonacini
 GB-InSAR 3D maps for deformation monitoring: the importance of the digital surface models in data georeferencing and interpretation
- Chairperson: John Hillier
- 15:30–15:45 EGU2012-6988
F. Shahzad and T. A. Ehlers
 Quantification of glacial and ground surface velocities from repeat terrestrial LiDAR scans
- 15:45–16:00 EGU2012-11024
M.J. Westoby, J. Brasington, N.F. Glasser, M.J. Hambrey, and J.M. Reynolds
 Close-range photogrammetric reconstruction of moraine dam failures
- 16:00–16:15 EGU2012-13302
C. Eisank, L. Dr?gu?, and T. Blaschke
 Object-based mapping of drumlins from DTMs
- 16:15–16:30 EGU2012-7816
J.R. Ford, B. Napier, P.R. Wilby, A.H. Cooper, A.J.M. Barron, and L.B. Bateson
 The central role of digital landscapes in virtual field reconnaissance for geological surveying
- 16:30–16:45 EGU2012-9258
S. J. Conway, M. R. Balme, and P. M. Grindrod
 Using Topographic Derivatives of High Resolution Data on Earth and Mars to Determine Active Processes on Mars.
- 16:45–17:00 EGU2012-11180
S. Ferrari, M. Massironi, R. Pozzobon, A. Castelluccio, G. Di Achille, and G. Cremonese
 DTM analysis and displacement estimates of a major mercurian lobate scarp.

PS2.1 – Mercury – Orals

Convener: J. Benkhoff | Co-Conveners: U. Christensen

Room: 18

Chairperson: n.n.

- 13:30–13:45 EGU2012-6188
L. M. Prockter, S. C. Solomon, R. L. McNutt, B. J. Anderson, D. T. Blewett, L. G. Evans, R. E. Gold, S. L. Murchie, L. R. Nittler, R. J. Phillips, J. A. Slavin, R. J. Vervack, and M. T. Zuber
 The New View of Mercury after MESSENGER's first year in orbit
- 13:45–14:15 EGU2012-9925
J.W. Head III, S.C. Solomon, C.I. Fassett, S.L. Murchie, L.M. Prockter, D.T. Blewett, B.W. Denevi, T.R. Watters, R.G. Strom, C.R. Chapman, J.J. Gillis-Davis, M.T. Zuber, D.E. Smith, J. Oberst, K. Gwinner, C.M. Ernst, L.R. Ostrach, P.K. Byrne, C. Klimczak, and Z. Xiao
 INVITED Effusive and Explosive Volcanism on Mercury from MESSENGER Orbital Observations
- 14:15–14:30 EGU2012-5341
J. M. Raines, D. J. Gershman, T. H. Zurbuchen, M. Sarantos, J. A. Slavin, J. A. Gilbert, H. Korth, B. J. Anderson, G. Gloeckler, S. Krimigis, D. N. Baker, R. L. McNutt Jr., and S. C. Solomon
 Compositional variations in the distribution of plasma ions in Mercury's magnetosphere: The first Mercury year of MESSENGER observations

- 14:30–14:45 EGU2012-9701
G. C. Ho, S. M. Krimigis, R. E. Gold, D. N. Baker, J. A. Slavin, B. A. Anderson, R. L. McNutt, and S. C. Solomon
 Dynamics of Energetic Electrons in Mercury's Magnetosphere
- 14:45–15:00 EGU2012-3813
J. A. Slavin, G. A. DiBraccio, J. M. Raines, T. H. Zurbuchen, G. Gloeckler, S. A. Boardsen, M. Sarantos, T. Sundberg, B. J. Anderson, H. Korth, G. C. Ho, S. M. Krimigis, R. L. McNutt, D. N. Baker, and S. C. Solomon
 MESSENGER Observations of Magnetopause Reconnection and Its Effects on Mercury's Magnetosphere
- Chairperson: n.n.
- 15:30–15:45 EGU2012-5146
D A Rothery
 Mercury - the hollow planet
- 15:45–16:00 EGU2012-6099
C. Carli, F. Capaccioni, A. Maturilli, E. Ammannito, S. Ferrari, F. Nestola, J. Helbert, M. Massironi, M. Sgavetti, and G. Serventi
 Studying basalts spectra in the VNIR and MidIR: what we could learn integrating data from VIHI and MERTIS the spectrometers onboard BepiColombo
- 16:00–16:15 EGU2012-10457
I. Mitrofanov
 Analysis of data from LEND instrument on LRO: May water deposits be expected on poles of Mercury?
- 16:15–16:30 EGU2012-5462
T. Van Hoolst, A. Rivoldini, R.-M. Baland, and M. Yseboodt
 The influence of an inner core and tides on Mercury's longitudinal libration
- 16:30–16:45 EGU2012-7626
N. Tosi, D. Breuer, A.C. Plesa, F. Wagner, and M. Laneuville
 Mercury's thermo-chemical evolution from numerical models constrained by Messenger observations
- 16:45–17:00 EGU2012-11449
M. Marabucci, A. Genova, and L. Iess
 Mercury's Gravity Field from BepiColombo MORE experiment
- 17:00–17:15 EGU2012-3253
A. Rivoldini and T. Van Hoolst
 Insight into Mercury's interior structure from recent data on its gravity field and spin state

PS2.6 – Geological processes in the Solar System – Orals

Convener: F. Jourdan | Co-Conveners: S. C. Werner, A. Deutsch

Room: 25

Chairperson: Fred Jourdan & Alex Deutsch

- 08:30–08:45 EGU2012-4816
A. Deutsch
 The Chicxulub impact at the K-Pg boundary - search for traces of the projectile
- 08:45–09:00 EGU2012-9140
M. Ebert, L. Hecht, A. Deutsch, and T. Kenkmann
 Chemical projectile-target interaction during hypervelocity cratering experiments (MEMIN project).
- 09:00–09:15 EGU2012-9391
J. Ormö, K. Wünnemann, G. Collins, and I. Melero Asensio
 Combined experimental and numerical approach to evaluate impact scaling relations and reproducibility of craters produced at the Experimental Projectile Impact Chamber (E.P.I.C., Centro de Astrobiología, Spain.)
- 09:15–09:30 EGU2012-396
D. S. Ramírez Mendoza and M. Ramírez Cardona
 Characterization of a recent impact structure (Carancas crater, Peru) by integrating geomorphologic and GPR data
- 09:30–09:45 EGU2012-6362
A. Riedo, S. Meyer, M. Tulej, M. Neuland, A. Bieler, M. Iakovleva, and P. Wurz
 A miniaturized laser-ablation mass spectrometer for in-situ measurements of isotope composition on solar body surfaces
- 09:45–10:00 EGU2012-10505
R. J. Wagner, G. Neukum, and N. Schmedemann
 Identification, mapping and size distribution of double and multiple craters on satellites of Saturn
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PS2.6 – Geological processes in the Solar System – Posters

Convener: F. Jourdan | Co-Conveners: S. C. Werner, A. Deutsch

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: Stephanie Werner

- XY434 EGU2012-4626
S. Sturm, G. Wulf, D. Jung, and T. Kenkmann
 New modeling results of the Bunte breccia ejecta morphology and thickness variations outside the Ries impact crater, southern Germany
- XY435 EGU2012-5200
A. Dufresne, M. H. Poelchau, T. Hoerth, F. Schaefer, K. Thoma, A. Deutsch, and T. Kenkmann
 Experimental impact crater morphology
- XY436 EGU2012-6574
A. Losiak, T. Schulz, and C. Koeberl
 Zircon U-Pb and Hf-Nd isotopic constraints on the genesis of granites from the vicinity of Bosumtwi crater
- XY437 EGU2012-8928
A. van Hoesel, W.Z. Hoek, G.M. Pennock, and M.R. Drury
 Quartz microstructures in the Younger Dryas boundary layer ~12.9 ka.
- XY438 EGU2012-1499
N. Mangold, J. Carter, F. Poulet, E. Dehouck, V. Ansan, and D. Loizeau
 Late Hesperian hydrothermal alteration at Majuro crater, Mars
- XY439 EGU2012-12730
M. Tulej, A. Riedo, S. Meyer, M. Iakovleva, M. Neuland, and P. Wurz
 Instrument for elemental composition studies of solids on planetary surfaces with sub-ppm detection sensitivity

TS1.2/GMPV4.14/PS2.10 – Volcanism and Tectonics in the Solar System (co-organized) – Orals

Convener: T. Platz | Co-Conveners: M. Massironi, G. Caprarelli, P. Byrne, P. Allemand, H. Hiesinger

Room: 25

Chairperson: Matteo Massironi, Pascal Allemand

- 10:30–10:45 EGU2012-10873
L. M. Prockter, J. H. Shirley, J. B. Dalton, and L. W. Kamp
 Composition of bands in Argadnel Regio, Europa: Implications for Volcanic Resurfacing.
- 10:45–11:00 EGU2012-3847
A. L. Nahm, M. E. Cameron, B. R. Smith-Konter, and R. T. Pappalardo
 Modeling of Stress Triggered Faulting at Agenor Linea, Europa
- 11:00–11:15 EGU2012-7846
L. Kerber, J.W. Head, J-B. Madeleine, F. Forget, and L. Wilson
 The Dispersal of Pyroclasts from Ancient Explosive Volcanoes on Mars: Implications for the Friable Layered Deposits
- 11:15–11:30 EGU2012-8876
M. O. Chevreil, T Platz, E Hauber, D Baratoux, and D.B. Dingwell
 Rheology of Icelandic lava flows as analogues for Mars: comparison between morphometric and experimental determinations
- 11:30–11:45 EGU2012-4982
R. Pozzobon, F. Mazzarini, M. Massironi, and G. Cremonese
 Self-similar clustering distribution of structural features on Ascaeus Mons (Mars): implications for magma chamber depth
- 11:45–12:00 EGU2012-690
L. Giacomini, M. Massironi, S. Marchi, and G. Cremonese
 Dating tectonic structures on Mercury

TS1.2/GMPV4.14/PS2.10 – Volcanism and Tectonics in the Solar System (co-organized) – Posters

Convener: T. Platz | Co-Conveners: M. Massironi, G. Caprarelli, P. Byrne, P. Allemand, H. Hiesinger

Hall A | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: Matteo Massironi

- A410 EGU2012-725
P. Fawdon
 Syrtis Major volcano evolution characterised from a terrestrial analogue.

- A411 EGU2012-8723
p. allemand, A. Deschamps, M. Lesaout, C. Delacourt, C. Quantin, and H. Clenet
Magma rheology from 3D geometry of martian lava flows
- A412 EGU2012-1804
A. Solomonidou, G. Bampasidis, M. Hirtzig, A. Coustenis, K. Kyriakopoulos, K. St. Seymour, E. Bratsolis, and X. Moussas
Morphotectonic features on Titan and their possible origin
- A413 EGU2012-11218
M. Massironi, G. Di Achille, S. Ferrari, L. Giacomini, C. Popa, R. Pozzobon, M. Zusi, G. Cremonese, and P. Palumbo
Transpressional Structures on Mercury
- A414 EGU2012-13347
A. L. Nahm
Forward Mechanical Modeling of Rima Ariadaeus, the Moon

PS4.1 – Comets, asteroids and dust (including David Bates Medal Lecture) – Posters

Convener: N. Altobelli | Co-Conveners: G. Schwehm

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: n.n.

- XY440 EGU2012-1547
O.B. Shchuko, S.D. Shchuko, D. Kartashov, and R. Orosei
Kuiper Belt Objects of different sizes and average densities: thermal evolution scenarios and modern structure of matter
- XY441 EGU2012-1679
J. Vaverka, M. Vysinka, J. Pavlu, J. Safrankova, and Z. Nemecek
Anomaly in Spontaneous Discharging of Glass Dust
- XY442 EGU2012-1681
M. Vysinka, J. Vaverka, J. Pavlu, J. Safrankova, and Z. Nemecek
Glassy dust grain - field emission when charged by electrons and ions
- XY443 EGU2012-1858
J. Pavlu, I. Richterova, J. Vaverka, M. Vysinka, Z. Nemecek, and J. Safrankova
Alteration of Glass Grains Under Electron Bombardment
- XY444 EGU2012-4521
M. Barthelemy, S. Martinez, D. Heather, J.L. Vazquez, C. Arviset, P. Osuna, and PSA development Team
The PSA: Planetary Science Archive
- XY445 EGU2012-5491
C. Koenders, K.-H. Glaßmeier, C. Nabert, and I. Richter
Revisiting Cometary Bow Shock Positions
- XY446 EGU2012-6994
F. Yamazaki and T. Nakamoto
Planetesimal Bow Shocks: Effects of H₂ Dissociation and Recombination
- XY447 EGU2012-8914
K. Markus, G. Arnold, H. Hiesinger, and F. Capaccioni
Analysis of ground-based and VIRTIS-M/ROSETTA reflectance spectra of asteroid 2687 Šteins: A comparison
- XY448 EGU2012-9675
J.-M. Petit, O. Mousis, and J. J. Kavelaars
Formation Location of Enceladus and Comets from D/H Measurements
- XY449 EGU2012-9590
M. Blecka, F. Capaccioni, M.C. De Sanctis, and M.T. Capria
Influence the various parameters of dust in the coma of the Comet 67P/Churyumov-Gerasimenko on radiance spectra
- XY450 EGU2012-9723
T. Nakamoto, M. Doi, T. Nakamura, and Y. Yamauchi
A Correlation among Shape, Composition, and Texture of Cosmic Spherules
- XY451 EGU2012-13795
A. Mura, C. Plainaki, A. Milillo, S. Orsini, S. Barabash, R. Leoni, S. Selci, I. Dandouras, E. Kallio, P. Wurz, and A. De Angelis
Neutral Atom Imaging of Near-Earth Asteroids
- XY452 EGU2012-12845
N. Masoumzadeh Jouzdani, J.-B. Vincent, H. Sierks, H. Boehnhardt, and M. Hofmann
The surface Topography of asteroid (21) Lutetia

- XY453 EGU2012-9749
D. Constantinescu, k.-H. Glassmeier, U. Auster, I. Richter, K.-H. Fornacon, and C. Carr
 On the possibility to determine the electrical conductivity of 67P/CG from ROSETTA magnetic field observations
- XY454 EGU2012-9907
C. Taricco, P. Colombetti, N. Bhandari, N. Sinha, M. Di Martino, and G. Vivaldo
 Cosmogenic radioisotopes in Gebel Kamil meteorite
- XY455 EGU2012-10294
O. Hartmann, S. C. Werner, B.A. Ivanov, and G. Neukum
 A Lunar-like Chronology Model as the Mass-influx Estimator for the Inner Solar System
- XY456 EGU2012-12051
Y. Brouet, AC Levasseur-Regourd, P. Encrenaz, M. Gheudin, V. Ciarletti, S. Gulkis, A. Jambon, G. Ruffié, and C. Prigent
 Laboratory measurements of dielectric properties of compact and granular materials, in relation with Rosetta mission.
- XY457 EGU2012-13027
 S. Hegler, C. Statz, **D. Plettemeier**, A. Herique, and W. Kofman
 Simulations of bistatic Soundings during the Separation-Descent-Landing Phase for the CoNSERT Instrument aboard Spacecraft "Rosetta"
- XY458 EGU2012-449
V.J. Sterken, N. Altobelli, P. Strub, H. Krüger, S. Kempf, R. Srama, and E. Grün
 Modeling the local size distribution of interstellar dust in the solar system
- XY459 EGU2012-13222
N. Altobelli, S. Kempf, F. Postberg, V. Sterken, R. Soja, R. Srama, G. Moragas, and E. Gruen
 CASSINI-CDA's Hunt for Exogenous Dust Particles around Saturn
- XY460 EGU2012-7791
D. Souami and J. Souchay
 The invariable plane of the solar system
- XY461 EGU2012-5061
 J. De Keyser and **F. Dhooghe**
 Using in situ coma composition measurements to probe a comet nucleus

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. Nemec, 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. Krieger, 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

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. Liliensten, 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 McCreia, 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

PS7.1 – Experimental and theoretical simulations – Orals

Conveners: L. Colangeli, J. Martin-Torres | Co-Conveners: R. Ziethe, K. Seiferlin, Sears

Room: 2

Chairperson: n.n.

- 10:30–10:45 EGU2012-1527
H. Nagahara
Oxygen isotope evolution in the protosolar disk induced by isotopic exchange reactions
- 10:45–11:00 EGU2012-7444
A. Varenikov, M. Litvak, I. Mitrofanov, R. Starr, and V. Shvetsov
Numerical simulation of DAN instrument in MCNPx.

- 11:00–11:15 EGU2012-10384
D.V. Uchaev, V.A. Malinnikov, Dm.V. Uchaev, I.S. Prutov, and J. Oberst
 A Multifractal Approximation for the Newtonian Potential of Small Solar System Bodies
- 11:15–11:30 EGU2012-11756
S. Stefani, G. Piccioni, M. Snels, D. Grassi, and A. Adriani
 Characterization of the CO₂ optical properties at typically planetary condition: measures and model
- 11:30–11:45 EGU2012-6533
S. Robert, A. Mahieux, N. Weiler, V. Wilquet, R. Drummond, A.C. Vandaele, J. Vander Auwera, R.R. Gamache, and J.-L. Bertaux
 Influence of line parameters on H₂O and HCl retrievals from VEX/SOIR spectra.
- 11:45–12:00 EGU2012-850
L. Noack and D. Breuer
 Plate tectonics simulations using reduced viscosity contrasts - The simple approach?

PS7.1 – Experimental and theoretical simulations – Posters

Conveners: L. Colangeli, J. Martin-Torres | Co-Conveners: R. Ziethe, K. Seiferlin, Sears

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: n.n.

- XY486 EGU2012-309
 Q. Delière, **S. Robert**, A.C. Vandaele, and M. Lepère
 Diode-laser measurements of CO₂-broadening coefficients in the ν_4 fundamental band of methane at room temperature
- XY487 EGU2012-5722
A. Souchon, Y. Daydou, P. Pinet, and S. Chevrel
 Experimental photometric characterization of natural granular surface samples: implications for planetary regoliths
- XY488 EGU2012-8064
A. McKinstry
 Modelling ocean circulation in Deep-ocean aquaplanets
- XY489 EGU2012-9512
M. Ciarniello, F. Capaccioni, and G. Filacchione
 A Monte Carlo routine to simulate scattering in particulate media
- XY490 EGU2012-13104
A.-C. Plesa and D. Breuer
 Thermo-chemical evolution of a one-plate planet: application to Mars
- XY491 EGU2012-5668
Y. Daydou, P. Pinet, A. Souchon, and S. Chevrel
 Contribution of multiangular geometry conditions on the photometric characterization of granular surface samples

PS8.1 – Planetary Evolution and Life – Orals

Convener: T. Spohn | Co-Conveners: L. Noack, D. Breuer, H. Lammer, A.F. Chicarro, F. Westall, J. L. Vago, M. Chaussidon, F. Raulin, O. Prieto-Ballesteros

Room: 28

Chairperson: T. Spohn, H. Lammer

- 15:30–15:45 EGU2012-2113
J.-P. P. de Vera, D. Schulze-Makuch, A. Khan, A. Lorek, A. Koncz, D. Möhlmann, and T. Spohn
 The adaptation potential of extremophiles to Martian surface conditions and its implication for the habitability of Mars
- 15:45–16:00 EGU2012-13234
L. Kaltenegger
 Observable Geology on exoplanets - from hot& cold, young & old
- 16:00–16:15 EGU2012-6272
C. Sotin, O. Grasset, and G. Schubert
 Convection and plate tectonics on extrasolar planets
- 16:15–16:30 EGU2012-118
D.S. Abbot, D. Archer, R.T. Pierrehumbert, F.J. Ciesla, and J.L. Bean
 Insensitivity of weathering behavior to planetary land fraction and effect on habitability

- 16:30–16:45 EGU2012-4583
 G. Ferri, G. Murante, A. Provenzale, L. Silva, and **G. Vladilo**
 Energy Balance Models of planetary climate as a tool for investigating the habitability of terrestrial planets
 and its evolution
- 16:45–17:00 EGU2012-11816
T. Spohn, L. Noack, D. Hoening, and D. Breuer
 Planetary Interior Evolution and Life

