

MOP 2017 Program

All oral sessions will take place in the Siegbahn room (Siegbahnsalen) in the Ångström building. Posters will be displayed in the foyer of the building. Coffee will be served in the foyer, and lunch will be served in the Rullan restaurant nearby.

Name badges, travel cards and other conference materials will be distributed during the icebreaker, and in front of Siegbahnsalen throughout the conference.

Posters in the first session will be on display from Monday until the end of the day on Tuesday. Posters for the second session will be displayed from Wednesday morning onwards. **Posters should be A0 portrait or smaller.** Materials for hanging/fixing posters will be provided.

Talks can be given on your own computer (VGA / HDMI required), or on a Mac that we will provide. Talks should not exceed the following time limits:

Contributed: 13 + 2 minutes for questions

Invited: 17 + 3 minutes

Tutorial: 25 + 5 minutes

A printed copy of the program will be provided during the meeting. A PDF is also available here.

SUNDAY June 11

18:00 - Ice-Breaker - Museum Gustavianum

Welcome drinks in the University museum on Akademigatan, directly opposite the main entrance to the cathedral, ~12 minutes walk from the central station. See the map on the front page. Conference materials will be handed out to those present.

MONDAY June 12

08:45 - Welcome Address

Saturn / Cassini overviews

Chair: David Andrews

- 09:00 - Cassini Measurements of Saturn's Magnetic Field: An Overview [Invited]
Nicholas Achilleos, Michele K. Dougherty
- 09:20 - Saturn's radiation belts after 13 years of Cassini MIMI/LEMMS observations [Invited]
Elias Roussos, Peter Kollmann, Norbert Krupp, Chris Paranicas, Donald Mitchell, Stamatios Krimigis, Thomas Armstrong
- 09:40 - Saturn's Global Magnetospheric Current System as Unraveled by Cassini Data
Jiang Liu, Krishan Khurana
- 09:55 - Pulsations in Saturn's magnetosphere [Invited]
Benjamin Palmaerts, Elias Roussos, Aikaterini Radioti, Denis Grodent, Norbert Krupp
- 10:15 - Field-aligned currents observations close to Saturn: Past and present [Invited]
Gregory Hunt, S. W. H. Cowley, E. J. Bunce, G. Provan, M. K. Dougherty, I. I. Alexeev, E. S. Belenkaya, V. V. Kalegaev, A. J. Coates

10:35 - COFFEE BREAK

Saturn / Magnetosphere structure & dynamics I

Chair: David Andrews

- 11:15 - Investigating the periodic 'flapping' and 'breathing' behaviour of Saturn's magnetodisc using Cassini equinox data
Arianna Sorba, Nick Achilleos, Patrick Guio, Chris Arridge, Nick Sergis, Michele Dougherty
- 11:30 - Flux transfer event observation at Saturn's dayside magnetopause by the Cassini spacecraft
Jamie M. Jasinski, James A. Slavin, Christopher S. Arridge, Gangkai Poh, Xianzhe Jia, Nick Sergis, Andrew J. Coates, Geraint H. Jones, J. Hunter Waite Jr.
- 11:45 - Two fundamentally different drivers of dipolarizations at Saturn
Zhonghua Yao, Denis Grodent, Licia Ray, Jonathan Rae, Andrew Coates, Zuyin Pu, Tony Lui, Katerina Radioti, Jack Waite, Geraint Jones, Ruilong Guo, William Dunn
- 12:00 - A Multi-Instrument Study of Dipolarizations within the Kronian Magnetotail
Andrew Smith, Caitriona Jackman, Michelle Thomsen, Don Mitchell
- 12:15 - Closed field line vortices and retrograde plasma motion in the nightside magnetosphere of Saturn
Zoltan Nemeth, Karoly Szego, Stanley W. H. Cowley

12:30 - LUNCH BREAK

Saturn / Magnetosphere structure & dynamics II

Chair: Gabby Provan

- 14:00 - Cassini observations of aperiodic waves on Saturn's equatorial current sheet
Carley J. Martin, Christopher S. Arridge
- 14:15 - Survey of intense whistler-mode emissions in Saturn's magnetosheath
David Pisa, Ali H. Sulaiman, Ondrej Santolik, George B. Hospodarsky, William S. Kurth, Donald A. Gurnett
- 14:30 - The Impact of Saturn's Non-axisymmetric Magnetosphere on the Solar Wind Flow
Ali H. Sulaiman, Xianzhe Jia, Nicholas Achilleos, Nick Sergis, Donald A. Gurnett, William S. Kurth
- 14:45 - A Novel Detection and Classification Method for Analysis of Interchange Injection Events at Saturn Using MIMI-CHEMS
Abigail Azari, Michael Liemohn, Xianzhe Jia, Nick Sergis, Abigail Rymer, Michelle Thomsen, Christopher Paranicas, Donald Mitchell, Jon Vandegriff

Saturn / Cassini proximal orbits I

Chair: Luke Moore

- 15:00 - Cassini RPWS Dust Observation During the F-ring and Proximal Orbits
S. -Y. Ye, W. S. Kurth, G. B. Hospodarsky, A. M. Persoon, D. A. Gurnett, M. Morooka, J. -E. Wahlund, H. -W. Hsu, M. Seiss, R. Srama
- 15:15 - Discovery of Protons between Saturn's F-Ring and G-Ring
Edward Sittler, Meredith Elrod, Robert Johnson, John Cooper, Wei-Lin Tseng, Todd Smith, Marcus Shappirio, David Simpson

15:30 - COFFEE BREAK

Saturn / Cassini proximal orbits II

Chair: Luke Moore

- 16:00 - Temporal and spatial variations of energetic ions and electrons in the inner Saturnian magnetosphere: Results of the high-latitude Cassini orbits 2016-2017
Norbert Krupp, Elias Roussos, Peter Kollmann, Chris Paranicas, Donald G. Mitchell, Krishan Khurana
- 16:15 - Local effects on Saturn's Electron Radiation Belts by Z-mode, O-mode, Chorus and EMIC waves
Emma Woodfield, Richard Horne, Sarah Glauert, Doug Menietti, Yuri Shprits
- 16:30 - Saturn Ionosphere – as detected by the RPWS during the proximal orbits
J.-E. Wahlund, W. M. Farrell, M. Morooka, D. Andrews, G. B. Hospdarsky, W. S. Kurth, and S.-Y. Ye
- 16:45 - The Saturnian near-ring plasma environment
Wei-Ling Tseng, Robert E. Johnson, Meredith K. Elrod, O. J. Tucker, Wing-Huen Ip
- 17:00 - A Diffusive Equilibrium Model for the Plasma Density from 2.5 to 10 R_S
A. M. Persoon, D. A. Gurnett, W. S. Kurth, J. B. Faden, J. B. Groene, A. H. Sulaiman, S.-Y. Ye, M. Morooka, and J.-E. Wahlund
- 17:15 - Dusty Plasma observation of Saturn's faint rings by Cassini/RPWS/LP
M. W. Morooka, J.-E. Wahlund, D. Andrews, A. Persoon, S.-Y. Ye, W. S. Kurth, M. K. Holmberg

TUESDAY June 13

Saturn / PPO - aurora & radio

Chair: Gabby Provan

- 09:00 - Cassini Grand Finale : new insights on the emission region and periodicities of Saturn Kilometric Radiation
Laurent Lamy, Philippe Zarka, Baptiste Cecconi, Bill Kurth, George Hospodarsky
- 09:15 - Planetary period oscillations in Saturn's magnetosphere [Invited]
Stanley W H Cowley and G Provan
- 09:35 - Tracking the evolution of rotating features in Saturn's magnetosphere using imagery from Cassini's UVIS, VIMS, and INCA.
Joe Kinrade, Sarah Badman, Rebecca Gray, Chris Paranicas, Bill Kurth, Donald Mitchell, Kevin Baines, Wayne Pryor, Henrik Melin, Tom Stallard
- 09:50 - Global Scale Periodic Responses in Saturn's Magnetosphere
Xianzhe Jia, Margaret Kivelson
- 10:05 - How are Planetary Period Oscillations Generated in Saturn's Magnetosphere?
Krishan K Khurana, Jonathan L. Mitchell, Ingo C. F. Mueller-Wodarg
- 10:20 - The observed effects of "ring rain" on the ionosphere of Saturn
James O'Donoghue, Luke Moore, Tom Stallard, Henrik Melin, Jack Connerney, Ron Oliverson

10:35 - COFFEE BREAK

Comparative magnetospheres I

Chair: Chihiro Tao

- 11:10 - Magnetosphere-Ionosphere Coupling at the Outer Planets [Tutorial]
Emma Bunce
- 11:40 - How are magnetospheric plasmas heated? [Invited]
Margaret Galland Kivelson
- 12:00 - Comparisons of Radio and Plasma Wave Observations from Juno and Cassini in Their Similar Orbits at Jupiter and Saturn
W. S. Kurth, D. A. Gurnett, G. B. Hospdarsky, S. Ye, J. D. Menietti, A. M. Persoon, A. Sulaiman, M. Imai, S. Tetrack, P. Zarka, L. Lamy, B. Cecconi, C. Louis, A. Lecacheux, W. M. Farrell, G. Fischer, J.-E. Wahlund, M. Morooka, M. K. Dougherty, S. J. Bolton, J. E. P. Connerney, S. M. Levin, P. Louarn, P. Valek, B. H. Mauk
- 12:15 - Plasma Heating, Large-Scale Injections and Radio Emissions at Saturn, Jupiter and Earth: Conclusions from Cassini and Implications for JUICE Observations of Jupiter
Pontus C. Brandt, Donald G. Mitchell, Norbert Krupp, Joseph Westlake, Kostas Dialynas, Baptiste Cecconi, Kunihiro Keika

12:30 - LUNCH BREAK

Comparative magnetospheres II

Chair: Emmanuel Chané

- 14:00 - The role of the solar wind for the outer planet magnetospheres [Tutorial]
Peter Delamere
- 14:30 - The Evidence for Solar Wind Control of Auroral Processes at Jupiter and Saturn
John Clarke
- 14:45 - Diurnal And Seasonal Variability of Uranus' Magnetosphere
Xin Cao, Carol Paty
- 15:00 - Detection of the infrared aurora of Uranus
H. Melin, T. S. Stallard, L. N. Fletcher, R. E. Johnson, J. O'Donoghue, L. Moore, C. Tao
- 15:15 - Comparing the Magnetospheres of Planets & Massive Stars [Invited]
Matthew Shultz

15:35 - COFFEE BREAK

Poster Session I - Saturn, Uranus, Neptune

Posters on display from Monday until Tuesday at the end of the session. Refreshments will be served during the session.

WEDNESDAY June 14

Jupiter / Juno I

Chair: Fran Bagenal

- 09:00 - Early Results from the Juno Mission [Invited]
Scott Bolton, Jack Connerney, Steve Levin and the Juno Science Team
- 09:20 - An Overview of Juno-UVS Observations of Jupiter's Auroras through Perijove 6
G. R. Gladstone, M. H. Versteeg, T. K. Greathouse, V. Hue, J. A. Kammer, J.-C. Gérard, D. Grodent, B. Bonfond, S. J. Bolton, J. E. P. Connerney, S. M. Levin, A. Adriani, W. S. Kurth, B. H. Mauk, P. Valek, D. J. McComas, G. S. Orton, and F. Bagenal
- 09:35 - Energetic particle measurements at Jupiter by the Juno-JEDI instrument [Invited]
George Clark, B. H. Mauk, D. K. Haggerty, C. P. Paranicas, P. Kollmann, A. M. Rymer, S. Bolton, E. J. Bunce, S.W.H Cowley, S. Levin, A. Adriani, F. Allegrini, F. Bagenal, J. E. P. Connerney, R.W. Ebert, G. R. Gladstone, T. Kimura, W. S. Kurth, D. J. McComas, D. Ranquist, J. Saur, J. R. Szalay, and P. W. Valek
- 09:55 - Plasma Observations in Jupiter's Polar Magnetosphere from the Jovian Auroral Distributions Experiment (JADE) [Invited]
R. W. Ebert, P. W. Valek, F. Allegrini, F. Bagenal, S. J. Bolton, J. E. P. Connerney, T. K. Kim, S. Levin, P. Louarn, C. E. Loeffler, D. J. McComas, C. Pollock, D. Ranquist, M. Reno, J. R. Szalay, M. F. Thomsen, S. Weidner, R. J. Wilson, and J. L. Zink
- 10:15 - Juno Magnetometer observations in the Jovian magnetosphere
Jack Connerney, Ronald J Oliverson, Jared R Espley, Daniel J Gershman, Jacob R Gruesbeck, Stavros Kotsiaros, Gina A DiBraccio, John L Joergensen, Peter S Joergensen, Jose M G Merayo, Troelz Denver, Mathias Benn, Jonas B Bjarno, Anastasia Malinnikova, Jeremy Bloxham, Kimberly M Moore, Scott J Bolton, Steven M Levin

10:30 - COFFEE BREAK

Jupiter / Juno II - polar observations

Chair: Fran Bagenal

- 11:00 - Juno spacecraft observations of plasma wave emissions in Jupiter's low-altitude polar regions
S. S. Tetrick, D. A. Gurnett, W. S. Kurth, M. Imai, G. B. Hospodarsky, S. J. Bolton, J. E. P. Connerney, S. M. Levin, and B. H. Mauk
- 11:15 - Particle energization and structuring of Jupiter's main auroral oval as diagnosed with Juno measurements of (>30 keV) energetic particles
Barry Mauk, Dennis Haggerty, Chris Paranicas, George Clark, Peter Kollmann, Abi Rymer, Scott Bolton, Steve Levin, Alberto Adriani, Frederic Allegrini, Fran Bagenal, Bertrand Bonfond, Jack Connerney, Rob Ebert, Randy Gladstone, Denis Grodent, Bill Kurth, Dave McComas, Drake Ranquist, Jamey Szalay, Sadie Tetrick, Phil Valek
- 11:30 - Observations of low energy plasma in Jupiter's sub-auroral magnetosphere
Philip Valek, Frederic Allegrini, F. Bagenal, S. Bolton, J. Connerney, R. W. Ebert, G. R. Gladstone, T. Kim, W. S. Kurth, S. Levin, P. Louarn, B. Mauk, D. J. McComas, Craig Pollock, D. Ranquist, M. Reno, J. R. Szalay, M. F. Thomsen, R. J. Wilson
- 11:45 - Electron measurements over Jupiter's Poles by the Jovian Auroral Distributions Experiment-Electrons (JADE-E) on Juno
Frederic Allegrini
- 12:00 - High Energy (>15 MeV) Particle Fluxes in Jupiter's Polar Regions
John Leif Jørgensen, Troelz Denver, Peter Siegbjørn Jørgensen, Jack Connerney
- 12:15 - Cyclotron maser mechanism at Jupiter: Juno observations
P. Louarn, F. Allegrini, D. J. McComas, P. W. Valek, W. S. Kurth, N. André, F. Bagenal, S. Bolton, J. Connerney, R. W. Ebert, M. Imai, S. Levin, J. R. Szalay, S. Weidner, R. J. Wilson

12:30 - LUNCH BREAK

Jupiter / Magnetosphere modelling

Chair: KC Hansen

- 14:00 - Magnetic Field Measurements and Derivation of Planetary Magnetic Field Models [Tutorial]
J. E. P. Connerney
- 14:30 - Global Magnetohydrodynamic Simulations of Jupiter's Magnetosphere: Results on Global Configuration and Plasma Circulation
Yash Sarkango, Xianzhe Jia, Gábor Tóth, Kenneth C. Hansen
- 14:45 - Asymmetries in the Jovian magnetosphere
Emmanuel Chané, Joachim Saur

15:00 - Excursion to Gamla Uppsala

Meet outside Ångström for a chartered bus ride to Ancient Uppsala. Fika will be provided at Café Odinsborg, after which you may explore the area yourselves, before taking the regular city bus directly back into town.

18:30 - PUBLIC EVENT: Lighting the giant planet auroras' - UNTIL 20:30

THURSDAY June 15

Jupiter - Solar Wind interaction / Aurora

Chair: Emmanuel Chané

- 09:00 - Response of Jupiter's auroras to conditions in the interplanetary medium as measured by the Hubble Space Telescope and Juno [Invited]
J. D. Nichols, S. V. Badman, F. Bagenal, S. J. Bolton, B. Bonfond, E. J. Bunce, J. T. Clarke, J. E. P. Connerney, S. W. H. Cowley, R. W. Ebert, M. Fujimoto, J.-C. Gérard, G. R. Gladstone, D. Grodent, T. Kimura, W. S. Kurth, B. H. Mauk, G. Murakami, D. J. McComas, G. S. Orton, A. Radioti, T. S. Stallard, C. Tao, P. W. Valek, R. J. Wilson, A. Yamazaki, I. Yoshikawa, ,
- 09:20 - Auroral explosion at Jupiter observed by the Hisaki satellite and Hubble Space Telescope during approaching phase of the Juno spacecraft [Invited]
T. Kimura, J. D. Nichols, R. L. Gray, C. Tao, G. Murakami, A. Yamazaki, S. V. Badman, F. Tsuchiya, K. Yoshioka, H. Kita, D. Grodent, G. Clark, I. Yoshikawa, and M. Fujimoto
- 09:40 - Revealing how the solar wind interacts with Jupiter's magnetosphere
Adam Masters
- 09:55 - Juno, Hubble and James Webb observing Jupiter's aurora
Denis Grodent, Bertrand Bonfond, Zhonghua Yao, Aikaterini Radtiti, Jean-Claude Gerard, Benjamin Palmaerts, Maité Dumont, G. Randall Gladstone, John T. Clarke, Jonathan D. Nichols, Emma J. Bunce, Lorenz Roth, Joachim Saur, Tomoki Kimura, Glenn S. Orton, Sarah V. Badman, Barry Mauk, John E. P. Connerney, David J. McComas, William S. Kurth, Alberto Adriani, Candice Hansen
- 10:10 - The Auroral Dynamic Duo - Jupiter's Independent Pulsating X-ray Hot Spots [Invited]
William R. Dunn, Graziella Branduardi-Raymont, Licia Ray, Caitriona M. Jackman, Ralph P. Kraft, Ron F. Elsner, I. Jonathan Rae, Zhonghua. Yao, Marissa. F. Vogt, G. Randy Gladstone, Glenn S. Orton, James A. Sinclair, Peter G. Ford, Georgina A. Graham, Raquel Caro-Carretero, Andrew J. Coates, Geraint H. Jones

10:30 - COFFEE BREAK

Jupiter / Aurora II

Chair: Randy Gladstone

- 11:00 - Concurrent ultraviolet and infrared observations of the north Jovian aurora during Juno's first perijove
J.-C. Gérard, B. Bonfond, G.R. Gladstone, A. Adriani, A. Mura, D. Grodent, M. H. Versteeg, T. K. Greathouse, V. Hue, A. Radioti, F. Altieri, G. Sindoni, A. Migliorini, B.M. Dinelli, M.L. Moriconi, S.J. Bolton, J.E.P. Connerney, S.M. Levin, J.A. Kammer, F. Fabiano
- 11:15 - Juno-UVS observation of the Io footprint during eclipse
V. Hue, G. R. Gladstone, T. K. Greathouse, M. Versteeg, J. Saur, M. W. Davis, B. Bonfond, D. C. Grodent, J.-C. Gérard
- 11:30 - The shift of Ganymede's magnetic footprint under influence of plasma pressure anisotropy
Tatphicha Promfu, Jonathan Nichols, Suwicha Wannawichian, John Clarke
- 11:45 - Plasma dynamics around Jupiter's inner magnetosphere deduced by EUV spectra of the Io plasma torus [Invited]
Kazuo Yoshioka, Fuminori Tsuchiya, Masato Kagitani, Tomoki Kimura, Go Murakami, Fumiharu, Suzuki, Reina Hikida, Atsushi. Yamazaki, Ichiro. Yoshikawa, Masaki Fujimoto
- 12:00 - Jupiter's auroral ionospheric H₃⁺ flows
Rosie E. Johnson, Tom S. Stallard, Henrik Melin, Jonathan D. Nichols and Stan W. H. Cowley

12:15 - Presentations for next MOP location

12:30 - LUNCH BREAK

Jupiter aurora and radio III

Chair: Randy Gladstone

- 14:00 - Radio emissions from Jupiter [Invited]
Philippe Zarka
- 14:20 - Source locations of Jupiter's decametric radio emissions measured by the modulation lane method
Kazumasa Imai, Charles A. Higgins, Masafumi Imai, Tracy Clarke
- 14:35 - Io-Jupiter decametric arcs observed by Juno/Waves compared to ExPRES simulations
C. K. Louis, L. Lamy, P. Zarka, B. Cecconi, and S. L. G. Hess
- 14:50 - Statistical beaming properties of Jupiter's decametric radiation using the Juno Waves instrument
M. Imai, W. S. Kurth, G. B. Hospodarsky, S. J. Bolton, J. E. P. Connerney, S. M. Levin
- 15:05 - Evolution and morphology of Jupiter's auroral-related stratospheric heating
James Sinclair, Glenn Orton, Thomas Greathouse, Leigh Fletcher, Vincent Hue, Julianne Moses, Patrick Irwin, Henrik Melin, Rohini Giles
- 15:20 - Jupiter's non-auroral ionosphere and magnetic equator
Tom Stallard, Angeline Burrell, Henrik Melin, Rosie Johnson, Steve Miller, James O'Donoghue, Luke Moore

15:35 - COFFEE BREAK

Poster Session 2 - Jupiter

Posters on display from Wednesday morning until the end of the meeting.

19:00 - Conference banquet in the Royal Hall at Uppsala Castle ("Slottet")

A cloakroom is provided for coats and jackets. Wine and non-alcoholic drinks are included with the meal.

- Regular Menu
- Asparagus salad with summer vegetables, hot-smoked salmon, wild garlic dressing and beetroot bread.
- Herb marinated lamb filet with morel sauce and roasted potatoes with chard.
- Rhubarb parfait with Swedish strawberries.

- Optional Menu (Vegan)
- Avocado mousse (moose?) with lentil salad, pickled vegetables and baked tomato
- Bean and tofu steak with asparagus sauce and roast cabbage
- Rhubarb sorbet with Swedish strawberries

If you have not already let us know about any specific dietary requirements, please do so ASAP.

FRIDAY June 16

Moons I

Chair: Lorenz Roth

- 09:00 - Interactions of moon atmospheres and interiors with the giant planets' magnetospheres
[Tutorial]
Joachim Saur
- 09:30 - Kinetic simulations of Ganymede's magnetosphere and the formation of Ganymede's surface brightness asymmetries
S. Fatemi, A. R. Poppe, K. K. Khurana, M. Holmstrom
- 09:45 - A Comprehensive Picture of Callisto's Magnetic Environment during the Galileo Era
Lucas Liuzzo, Sven Simon, Moritz Feyerabend, Uwe Motschmann
- 10:00 - Is there an ocean inside Callisto? Revisiting Galileo spacecraft magnetic field measurements.
Oliver Hartkorn, Joachim Saur
- 10:15 - JUICE: A European Mission to Jupiter and its Icy Moons
Olivier Witasse, Stas Barabash, Pontus Brandt, Lorenzo Bruzzone, Baptiste Cecconi, Michele Dougherty, Leigh Fletcher, Randy Gladstone, Olivier Grasset, Leonid Gurvits, Paul Hartogh, Hauke Hussmann, Luciano Iess, Ralf Jaumann, Yasumasa Kasaba, Yohai Kaspi, Norbert Krupp, Yves Langevin, Ingo Mueller-Wodarg, Pasquale Palumbo, Giuseppe Piccioni, Jeff Plaut, Hanna Rothkaehl, Ondrej Santolik, David Stevenson, Jan-Erik Wahlund, Peter Wurz, Adam Masters, Nicolas Altobelli, Claire Vallat, Christian Erd, Arnaud Boutonnet, Ignacio Tanco, Japeth Yates

10:30 - COFFEE BREAK

Moons II

Chair: Annie Wellbrock

- 11:00 - The Alfvén wings of Europa and Enceladus
Frank Crary, Aljona Bloeker, Sven Simon
- 11:15 - Sputtering of Large Organic Molecules from Satellites in Planetary Magnetospheres: Modeling Based on Laboratory Studies at Uppsala
Robert E Johnson, B.U.R Sundqvist
- 11:30 - Are the Enceladus Plumes a Hotbed of Negativity?
Abigail Rymer, Ann Persoon, Michiko Morooka, Andrew Coates, Donald G. Mitchell, Shengyi Ye, Mark Perry
- 11:45 - Cassini at Titan: What have we learned after more than a decade of observations? [Invited]
Darci Snowden
- 12:05 - Titan's ionospheric ions through the solar cycle
O. Shebanits, E. Vigren, J.-E. Wahlund, M.K.G. Holmberg, M. Morooka, N.J.T. Edberg, K.E. Mandt, J.H. Waite Jr
- 12:20 - Observations of photoelectron energy peaks in Titan's ionosphere
Anne Wellbrock, Raquel Caro-Carretero, Yutian Cao, Andrew J. Coates, Geraint H. Jones

12:35 - LUNCH BREAK

Io and Io Torus

Chair: Olivier Witasse

- 14:00 - Plasma transport out of the Io torus: Open questions
Vytenis M. Vasyliunas
- 14:15 - Io's plasma interaction with Jupiter's magnetosphere: Influence of global asymmetries in Io's atmosphere and volcanic plumes on the plasma environment
Aljona Blöcker, Joachim Saur, Lorenz Roth
- 14:30 - Enhancement of Jovian magnetospheric plasma circulation due to mass supply change from the satellite Io
Fuminori Tsuchiya, Tomoki Kimura, Kazuo Yoshioka, Mizuki Yoneda, Ryoichi Koga, Masato Kagitani, Go Murakami, Chihiro Tao, Hiroaki Misawa, Atsushi Yamazaki, Ichiro Yoshikawa, Yasumasa Kasaba, and HISAKI science team
- 14:45 - Behavior of hot electrons in the Io Plasma Torus during the transient brightenings confirmed by Hisaki/EXCEED observation
Reina Hikida, Kazuo Yoshioka, Go Murakami, Tomoki Kimura, Fuminori Tsuchiya, Ichiro Yoshikawa
- 15:00 - CPEM: An empirical probability model of cold plasma environment in Jovian inner magnetosphere
Yoshifumi Futaana, Xiao-Dong Wang, Elias Roussos, and JCAT/CPEM team
- 15:15 - Characterizing Io's Plasma Torus at Visible Wavelengths in the Hisaki Era
Carl Schmidt, Nick Schneider, Francois Leblanc, Candace Gray, Jeff Morgenthaler, Jake Turner, Cesare Grava

Poster Session 1 - Saturn / Uranus / Misc.

- **1** - Statistical properties of Flux ropes at Titan: Cassini magnetometer observations
Carley J. Martin, C. S. Arridge, S. V. Badman
- **2** - Ion Precipitation into Titan's Atmosphere over Short and Long Timescales
Darci Snowden, Skylier Jones, Alex Higgins
- **3** - Titan's Topside Ionospheric Composition: Cassini Plasma Spectrometer Ion Mass Spectrometer Measurements
Edward C. Sittler Jr., Richard Hartle, Ashraf Ali, John Cooper, Alexander Lipatov, David Simpson, Menelaos Sarantos, Marcus Shappirio, Dennis Chornay, Todd Smith
- **4** - Electron population in Titan's ionosphere: interpretation of Cassini dataset and open questions
E. Vigren, M. Galand, J.-E. Wahlund, J. Cui, O. Shebanits, N.j.t. Edberg, A. Wellbrock, A. J. Coates, P. Lavvas, V. Vuitton
- **5** - A case study of the variability of Titan's ionosphere: T118 and T119
Niklas Edberg, Erik Vigren, Jan-Erik Wahlund
- **6** - Ions and dust in Titan's ionosphere: A multi-instrument case study
O. Shebanits, J.-E. Wahlund, N. J. T. Edberg, F. J. Crary, A. Wellbrock, D. J. Andrews, E. Vigren, R. T. Desai, A. J. Coates, K. E. Mandt, and J. H. Waite Jr
- **7** - The aurorae of Uranus past equinox
L. Lamy, R. Prangé, K. C. Hansen, C. Tao, S. W. H. Cowley, T. Stallard, H. Melin, N. Achilleos, P. Guio, S. V. Badman, T. Kim, N. Pogorelov
- **8** - HST remote observations of Saturn's aurorae during the Cassini Grand Finale
Laurent Lamy, Sarah Badman, Frank Crary Renee Prangé, John Clarke, Philippe Zarka, Baptiste Cecconi, Bill Kurth, Don Mitchell, Wayne Pryor, Ulyana Dyudina, Emma Bunce, Michele Dougherty, Katerina Radioti, Jonathan Nichols, Marcia Burton
- **9** - Magnetohydrodynamics (MHD) simulations of the interaction of the solar wind with Saturn and Uranus
Léa Griton, Filippo Pantellini, Michel Moncuquet
- **10** - The Variability of the Saturn-Titan Interaction as Observed with Energetic Neutral Atoms (ENAs) from Cassini MIMI-INCA
Joseph H. Westlake, Donald G. Mitchell, Pontus C. Brandt
- **11** - Energetic plasma environment at Titan's orbit
Leonardo Regoli, Elias Roussos, Janet Luhmann, Kostas Dialynas, Xianzhe Jia, Abigail Azari, Norbert Krupp, Geraint Jones, Andrew Coates
- **12** - Low Frequency Extensions of the Saturn Kilometric Radiation as a proxy for magnetospheric dynamics
Joe Reed, C. M. Jackman, L. Lamy, D. Whiter, W. S. Kurth
- **13** - North-south asymmetry of Saturn's auroral radio emissions: The seasonal variation of their fluxes in half of Kronian year
Y. Kasaba, T. Kimura, A. Sasaki, C. Tao, L. Lamy, and B. Cecconi
- **14** - Seasonal variation of energetic C⁺ and CO⁺ abundances in Saturn's magnetosphere related to ring illumination
D.C. Hamilton and S.P. Christon
- **15** - Detecting dust hits around Saturn in CAPS / ELS Data from Cassini
Jon Vandegriff, Geraint Jones, Hunter Waite, Payton Stoneberger

- **16** - Planetary period oscillations in Saturn's magnetosphere: The crossing of the periods and surprises on the F-ring orbits.
G. Provan, S. W. H. Cowley, L. Lamy, E. J. Bunce, G. J. Hunt, P. Zarka, and M. K. Dougherty
- **17** - Ion acceleration above Saturn's polar ionosphere as measured in Energetic Neutral Atom emission: new results from the Cassini high latitude F-Ring orbits.
Donald G. Mitchell
- **18** - Advances on the magnetospheric dynamics of Saturn revealed from UVIS/Cassini auroral observations during the Grand finale phase of the mission
Aikaterini Radioti, Denis Grodent, Zhonghua Yao, Jean-Claude Gérard, Sarah Badman, Wayne Pryor, Bertrand Bonfond
- **19** - Variability in high latitude magnetic field observations at Saturn
Ewen Davies, Adam Masters, Michele Dougherty, Andrew Coates, K.C. Hansen, Nick Sergis
- **20** - Survey of plasma composition in Saturn's magnetosphere
Marianna Felici, Christopher Arridge, Andrew Coates, Rob Wilson, Michelle Thomsen, Dan Reisenfeld
- **21** - Energy-banded ions in Saturn's inner magnetosphere: Consequence of field line resonance?
M. F. Thomsen, S. V. Badman, C. M. Jackman, X. Jia, M. G. Kivelson, and W. S. Kurth
- **22** - The Fried Egg Velocity Distribution
Fran Bagenal, Frank Crary, Rob Wilson, Jamey Szalay
- **23** - Seasonal and solar cycle modulations of Saturn's inner plasma disk
Mika Holmberg, Oleg Shebanits, Jan-Erik Wahlund, Michiko Morooka, Erik Vigren, Nicolas André, Philippe Garnier, Ann Persoon, Lin Gilbert
- **24** - Radial and local time structure of the Saturnian Ring Current
Nick Sergis, Caitriona Jackman, Michelle Thomsen, Tom Krimigis, Donald Mitchell, Douglas Hamilton, Michele Dougherty, Norbert Krupp, Robert Wilson
- **25** - Plasma transport and magnetic flux circulation in Saturn's Magnetosphere.
Bishwa Neupane, Peter Delamere, Xuanye Ma
- **26** - Momentum and Angular Momentum Exchange between Solar Wind, Magnetosphere and High Latitude Ionosphere at Saturn
David Southwood, Emmanuel Chané
- **27** - Composition and density of F-ring neutrals and ions from INMS measurements
Mark Perry, Tom Cravens, Todd Smith, Ben Teolis, Rebecca Perryman, Hunter Waite, Ralph McNutt
- **28** - Refurbishing Voyager/PRA data
Baptiste Cecconi, Anaïs Pruvot, Laurent Lamy, Philippe Zarka, Corentin Louis, Sébastien L. G. Hess, Doc. R. Evans, Danièle Boucon
- **29** - Dynamics of Charged Particles Trapped in a Gas Giant Magnetodisc
Patrick Guio, Nick Achilleos, Chris Arridge, Ned Staniland
- **30** - On the Elliptical Polarisation in Jupiter and Saturn Radio Emissions
A. Lecacheux, T.E. Clarke, W.S. Kurth, M. Imai and C.A. Higgins
- **31** - Solar wind interaction, structure, and dynamics of the outer planet magnetospheres: A report on the ongoing activities of two ISSI teams
Marissa F. Vogt, Caitriona M. Jackman, Adam Masters, Chris P. Paranicas, Sarah V. Badman, Bertrand Bonfond, Emmanuel Chané, George Clark, Peter A. Delamere, William R. Dunn, Robert W. Ebert, Hiroshi Hasegawa, Suzanne M. Imber, Krishan K. Khurana, Elena A. Kronberg, William S. Kurth, Philippe Louarn, Jonathan D. Nichols, Aikaterini Radioti, Joe Reed, Elias Roussos, Andy W. Smith, Chihiro Tao, and Michelle F. Thomsen
- **32** - The prevalence of negative ions in Saturn's inner magnetosphere
Geraint H. Jones, Andrew J. Coates, Michelle Thomsen
- **33** - The electrostatic plasma environment of Hyperion

Andrew R. Poppe, Tom A. Nordheim, Michael I. Zimmerman, and Shahab Fatemi

- **34** - A Comprehensive Survey of Low-Frequency Plasma Waves in the Saturnian Magnetosphere
Zachary Meeks, Sven Simon, Frank Crary
- **35** - Ion Cyclotron Waves in Saturn's Equatorial Magnetosphere: Cassini Observations and Hybrid Modeling
Zachary Meeks, Lucas Liuzzo, Sven Simon
- **36** - The distribution of water-group neutrals in Saturn's Magnetosphere
H. Todd Smith, John D. Richardson
- **37** - Constraining ion outflows at Rhea
R. T. Desai, G. H. Jones, L. H. Regoli, M. M. Cowee, A. J. Coates
- **38** - Enceladus Plasma and Dust Environment
I.a.d. Engelhardt, J.-E. Wahlund, D.J. Andrews, A.I. Eriksson, S. Ye, W.S. Kurth, D.A. Gurnett, M.W. Morooka, W.M. Farrell, M.K. Dougherty
- **39** - Quantifying momentum transport at Saturn's magnetopause boundary
Brandon Burkholder, Peter Delamere, Xuanye Ma
- **40** - Field-aligned currents in Saturn's magnetosphere: Comparison of subcorotation and PPO-related components between Saturn southern summer and northern spring
Thomas Bradley, Stanley Cowley, Igor Alexeev, Emma Bunce, Gabrielle Provan, Gregory Hunt, Samuel Wharton, Michelle Dougherty
- **41** - Investigation of the electron density close to the rings of Saturn and Prediction of the F-ring plasma characteristics
George Xystouris, Michiko Morooka, Jan-Erik Wahlund, Mika Holmberg, Ann Persoon
- **42** - Characterizing Plasma Waves during Cassini's F ring and Proximal Orbits
Ali Sulaiman, William Kurth, Donald Gurnett, Michel Moncuquet, Ann Persoon, David Píša, George Hospodarsky
- **43** - The Kronian Magnetotail X-line: A Multi-Instrument Perspective
Andrew Smith, Caitriona Jackman, Michelle Thomsen
- **44** - Solar Energetic Protons (SEP) as tracers of enhanced solar wind conditions upstream of Saturn's magnetosphere: event list and applications
Elias Roussos, Caitriona Jackman, Michelle Thomsen, Chris Paranicas, William Kurth, Sarah Badman, Norbert Krupp, Peter Kollmann, Aikaterini Radioti
- **45** - Preliminary results from the Cassini Cosmic Dust Analyser during the Grand Finale Mission
Hsiang-Wen Hsu, Nicolas Altobelli, Marcia Burton, Mihaly Horanyi, Sascha Kempf, Nozair Khawaja, Georg Moragas-Klostermeyer, Frank Postberg, Juergen Schmidt, Martin Seiss, Frank Spahn, Ralf Srama
- **46** - Interhemispheric asymmetries in Saturn's aurora
Sarah Badman, Laurent Lamy, Renee Prangé, John Clarke, Philippe Zarka, Baptiste Cecconi, Bill Kurth, Don Mitchell, Wayne Pryor, Frank Crary, Ulyana Dyudina, Emma Bunce, Marcia Burton, Michele Dougherty, Katerina Radioti, Jon Nichols, Henrik Melin, Joe Kinrade, Greg Hunt
- **47** - The Atmosphere of Pluto: Synthesis of Results from the New Horizons Mission
Darrell F. Strobel, Xun Zhu, Alice (Leslie Young, Josh Kammer, Andrew Steffl et al.) & Rex (Dave Hinson et al.) Teams
- **48** - Joint Europa Mission (JEM) : A multi-scale study of Europa to characterize its habitability and search for life
Nicolas Andre, Michel Blanc, Olga Prieto Ballesteros, John F. Cooper, and the Jem proposal Team
- **49** - Radiation-induced background noise for Channel Electron Multipliers at the orbit of the Galilean moons from Galileo PLS measurements
Nicolas André, William Paterson, Andréi Fedorov, Edward Sittler, Nicholaos Paschalidis, John Cooper

- **50** - Small Satellite Missions to Explore Jupiter's Magnetosphere
Frank Crary, George Clarke, Robert Ebert, Frederic Allegrini, Fran Bagenal, Chip Beebe, Ian Cohen, Peter Delamere, Mihir Desai, Don George, John Hanley, George Ho, Peter Kollmann, Neil Murphy, Chris Paranicas, Abigail Rymer, Todd Smith, Marissa Vogt, Aron Wolf
- **51** - CubeSat project for the observation of Jupiter's decametric radio emissions
Kazumasa Imai, Lkhagvadorj Sukhtsoodol, Mizuki Ando, Nobuto Hirakoso, KOSEN-Space-Renkei Group
- **52** - Planetary magnetospheric studies with the Large Ultra-Violet Optical Infrared (LUVOIR) surveyor.
Walter Harris (University of Arizona), Britney Schmidt (Georgia Tech University), Geronimo Villanueva (Goddard Space Flight Center), and the Luvoir solar system science definition team
- **53** - Energy conversion regions in the plasma around comets
Jesper Lindkvist, Maria Hamrin, Herbert Gunell, Hans Nilsson, Timo Pitkänen, Cyril Simon Wedlund, Etienne Behar

Poster Session 2 - Jupiter

- **1** - Radio occultations of the Io plasma torus with the Juno spacecraft: A study of feasibility
Phillip H. Phipps, Paul Withers
- **2** - Radio emission from the Ganymede-Jupiter interaction and consequence for radio emissions from exoplanets
Philippe Zarka, Manilo Soares-Marques, Corentin Louis, Vladimir Ryabov, Laurent Lamy, Ezequiel Echer, Baptiste Cecconi, Sébastien Hess, Andrée Coffre, Laurent Denis
- **3** - Detection of Jupiter decametric emissions controlled by Europa and Ganymede with Voyager/PRA and Cassini/RPWS
C. K. Louis, L. Lamy, P. Zarka, B. Cecconi, and S. L. G. Hess
- **4** - A new physical model of the electron radiation belts of Jupiter inside Europa's orbit: on the key role of the plasma waves above the orbit of Io
Quentin Nénon, Angélica Sicard, Sébastien Bourdarie
- **5** - An updated physical model of the proton radiation belts of Jupiter inside Europa's orbit
Angélica Sicard, Quentin Nénon
- **6** - The Jovian Current Sheet as Observed by Juno's JADE
R.J. Wilson, F. Bagenal, P.W. Valek, D.J. McComas, S.J. Bolton, F. Allegrini, N.G. Angold, J.e.p. Connerney, K. Chae, R.W. Ebert, T.K. Kim, S. Levin, C.E. Loeffler, P. Louarn, D.A. Ranquist, M. Reno, J.R. Szalay, M.F. Thomsen, S. Weidner, J.L. Zink
- **7** - Statistical analyses of Jovian Io and non-Io decametric emissions using the new Nancay 26-year catalog
E. Echer, M. S. Marques, P. Zarka, V. B. Ryabov, M. V. Alves, L. Denis, A. Coffre
- **8** - Variations of Jupiter's auroral radio emission in relation to magnetospheric plasma enhancement event
Hiroaki Misawa and Fuminori Tsuchiya
- **9** - Energetic ions and electrons inward of Jupiter's rings from Juno/JEDI
P. Kollmann, C. Paranicas, G. Clark, A. M. Rymer, B. H. Mauk, D.K. Haggerty, L. Brown, J. Peachey, D. Santos-Costa, J. Saur., J. E. P. Connerney, F. Allegrini, P. Valek, W. S. Kurth, G. R. Gladstone, S. Levin, S. Bolton
- **10** - H/H₂ Brightness Ratio of Jupiter Aurora
Chihiro Tao, Laurent Lamy, Renée Prangé, Nicolas André, Sarah V. Badman
- **11** - Studying Jupiter's X-ray aurora with Chandra

- Caitriona Jackman, Will Dunn, Ralph Kraft, Randy Gladstone, Graziella Branduardi-Raymont*
- **12** - Juno/JEDI observations of energetic ion precipitation in the Jovian auroral region
D. K. Haggerty, B. H. Mauk, C. Paranicas, G. Clark, P. Kollmann, A. M. Rymer, S. J. Bolton, J. E. P. Connerney, S. M. Levin.
 - **13** - The spatial distribution of atomic oxygen emission at 130.4 nm around Io's orbit observed by Hisaki/EXCEED.
Ryoichi Koga, Fuminori Tsuchiya, Masato Kagitani, Takeshi Sakanoi, Mizuki Yoneda, Kazuo Yoshioka, Tomoki Kimura, Ichiro Yoshikawa, Atsushi Yamazaki, Go Murakami, Smith, H. Todd
 - **14** - Kinetic Alfvén wave propagation and electron trapping in the Io plasma torus
P.A Damiano, B. Stauffer, P.A. Delamere, and J.R. Johnson
 - **15** - The Juno Investigation of Jupiter's Magnetosphere: Orbit and Science
B.A. Bolton, I.e.p. Connerney
 - **16** - Jupiter's Plasma Sheet and Io Torus: Voyager, Galileo, Cassini, Hisaki, Juno
Fran Bagenal
 - **17** - Linking High Latitude Ion Observations to Equatorial Sources at Jupiter
J. R. Szalay, F. Allegrini, F. Bagenal, S. Bolton, G. Clark, J. E. P. Connerney, R. W. Ebert, D. J. Gershman, W. S. Kurth, S. Levin, P. Louarn, B. Mauk, D. J. McComas, C. Paranicas, D. Ranquist, M. Reno, M. F. Thomsen, P. W. Valek, S. Weidner, R. J. Wilson
 - **18** - The Search for the Kelvin-Helmholtz Instability on Jupiter's Dawn Side Magnetopause using Juno
Drake Ranquist, Fran Bagenal, Stefan Eriksson, Rob Wilson, George Hospodarsky, Daniel Gershman, John Connerney, William Kurth, Philip Valek, Barry Mauk, Peter Delamere
 - **19** - The Commissioning of the Io Input/Output Facility (IoIO), a robotic observatory for studying Jupiter's magnetospheric response to Io's volcanic activity
Jeff Morgenthaler, Julie Rathbun
 - **20** - What impedes radial transport of material in Jupiter's inner magnetosphere?
Jeff Morgenthaler (Planetary Science Institute), Max Marconi (Prisma Basic Research)
 - **21** - Image processing of ground based observations of [SII] emission lines from the Io plasma torus
Fabiola Pinho Magalhaes, Walter Gonzalez, Ezequiel Echer, Mariza Pereira Echer, Jeff Morgenthaler, Rosaly Lopes
 - **22** - Juno Bow Shock and Magnetopause Encounters at Jupiter
G. B. Hospodarsky, W. S. Kurth, S. J. Bolton, F. Allegrini, G. B. Clark, J. E. P. Connerney, R. W. Ebert, D. K. Haggerty, S. Levin, D. J. McComas, C. Paranicas, A. M. Rymer, P. W. Valek and C. Tao
 - **23** - Enhancing Jupiter's Auroral Second Oval
Rebecca Gray, Sarah Badman, Emma Woodfield, Chihiro Tao
 - **24** - Characteristics of temporal variations in IPT and auroral emissions deduced by EXCEED
Fumiharu Suzuki, Kazuo Yoshioka, Go murakami, Fuminori Tsuchiya, Tomoki Kimura, and Ichiro Yoshikawa
 - **25** - Variation of ion and electron temperature on Io plasma torus during an outburst measured with Hisaki/EXCEED and ground-based telescope
Masato Kagitani, Mizuki Yoneda, Ryoichi Koga, Fuminori Tsuchiya, Kazuo Yoshioka, Go Murakami, Tomoki Kimura, Ichiro Yoshikawa
 - **26** - Ion compositions in Jupiter's magnetosphere observed by Juno JADE-I
Thomas K. Kim, P. W. Valek, D. J. McComas, F. Allegrini, N. G. Angold, F. Bagenal, S. J. Bolton, K. Chae, C. Loeffler, R. W. Ebert, S. Levin, P. Louarn, C. Pollock, D. A. Ranquist, J. R. Szalay, M. L. Reno, M. F. Thomsen, S. Weidner, R. J. Wilson, J. L. Zink
 - **27** - Variability of Jupiter's IR H3+ aurorae during Juno approach
Luke Moore, James O'Donoghue, Henrik Melin, Tom Stallard, Chihiro Tao, Bertalan Zieger, John Clarke, Marissa F. Vogt, Tanapat Bhakyapaibul, Merav Opher, Gabor Tóth, John E. P. Connerney,

Steve Levin, and Scott Bolton

- **28** - Magnetosphere - Ionosphere - Thermosphere (MIT) coupling at Jupiter
Japheth Yates, Licia Ray, Nick Achilleos
- **29** - Comparison of a Physical Chemistry Model of the Io Plasma Torus with Measurements by JAXA's Hisaki Mission, NASA's Juno Mission and Other Earth-based Observations
Edward G. Nerney, Fran Bagenal, Andrew J. Steffl, & Kazuo Yoshioka
- **30** - North and South: Simultaneous observations of both Jovian poles from Juno and the Hubble Space Telescope
Bertrand Bonfond, George R. Gladstone, Denis Grodent, , Zhonghua Yao, Jean-Claude Gérard, Thomas K. Greathouse, Maarten Versteeg, Vincent Hue, Michael W. Davis, Aikaterini Radioti, Scott J. Bolton, Steven M. Levin, John E. P. Connerney
- **31** - Correcting Galileo's Energetic Particle Detector (EPD) data; Methodology, Implications and Applications
Zoe Lee-Payne, Manuel Grande
- **32** - Variation of Jupiter's Auroral Electron Parameters Observed by Hisaki/EXCEED
Chihiro Tao, Tomoki Kimura, Fuminori Tsuchiya, Go Murakami, Kazuo Yoshioka, Hajime Kita, Atsushi Yamazaki, Sarah V. Badman, Nicolas André, Yasumasa Kasaba, Ichiro Yoshikawa, and Masaki Fujimoto
- **33** - Variations of Bright Spot emission in Jupiter's Polar Aurora
Kamolporn Haewsantati, Suwicha Wannawichian, John Clarke, Jonathan Nichols
- **34** - Spatial Distribution and Properties of 0.1 – 100 keV Electrons in Jupiter's Polar Region
R. W. Ebert, F. Allegrini, F. Bagenal, S. J. Bolton, J. E. P. Connerney, G. Clark, W. S. Kurth, S. Levin, P. Louarn, B. H. Mauk, D. J. McComas, C. Paranicas, M. Reno, J. R. Szalay, M. F. Thomsen, P. W. Valek, S. Weidner, and R. J. Wilson
- **35** - Wave particle interactions in Jupiter's magnetosphere and associated particle acceleration
J. Saur, A. Schreiner, B.H. Mauk, G.B. Clark, P. Kollmann
- **36** - Magnetosphere-ionosphere coupling at Jupiter: Expectations for observations on Juno perijove passes based on a steady-state axisymmetric physical model
Stanley Cowley, Gabrielle Provan, Emma Bunce, and Jonathan Nichols
- **37** - IPIM: A new numerical Jupiter ionosphere-auroras model
Baptiste Chide, Pierre-Louis Blelly, Mikel Indurain, Olivier Witasse, Aurélie Marchaudon
- **38** - Characteristics of solar wind control on Jovian UV auroral activity obtained from Hisaki EXCEED and ground-based observations
Hajime Kita, Tomoki Kimura, Chihiro Tao, Fuminori Tsuchiya, Hiroaki Misawa, Takeshi Sakanoi, Yasumasa Kasaba, Go Murakami, Kazuo Yoshioka, Atsushi Yamazaki, Ichiro Yoshikawa, Masaki Fujimoto
- **39** - The Jovian Energetic Electron Spectrometer (JoEE) on the Particle Environment Package (PEP) for the ESA JUICE mission
George C. Ho, C. Paranicas, C.W. Parker, P.C. Brandt, S. Barabash and the Pep Team
- **40** - Methods for estimation of radiation effects on particle instrument in Jupiter's magnetosphere
Stefan Karlsson, Elias Roussos, Leif Kalla, Martin Wieser, Manabu Shimoyama, Goh Rusty Weixiong
- **41** - Particle Environment Package (PEP) for the ESA JUICE mission
Stas Barabash, Pontus Brandt, Peter Wurz, and the Pep team
- **42** - The search for Europa plume signatures in Galileo plasma particle data
Hans Huybrighs, Elias Roussos, Norbert Krupp, Markus Fraenz, Yoshifumi Futaana, Stas Barabash, Karl-Heinz Glassmeier
- **43** - Interaction of the magnetospheric plasma with the Jovian moons for the formation of their atmospheres and ionospheres: NIM / PEP investigations
Audrey Vorburger, Peter Wurz, André Galli, Martin Rubin, Pontus Brandt, Stas Barabash

- **44** - Electron measurements in the low-latitude magnetosphere of Jupiter and in the vicinity of the Galilean moons: Current knowledge and future investigations with the PEP JEI and JoEE sensors onboard the JUICE spacecraft
Norbert Krupp, Markus Fränz, Elias Roussos, Hans Huybrighs, Stas Barabash, Pontus C. Brandt, Chris Paranicas, Donald G. Mitchell, Joseph Westlake, Krishan Khurana, Xianzhe Jia
- **45** - The Jovian Energetic Neutrals and Ions (JENI) 2nd Generation ENA and Ion Camera of the Particle Environment Package (PEP) on board the JUICE Mission
Pontus C. Brandt, Donald G. Mitchell, Joseph H. Westlake
- **46** - The Search-Coil Magnetometer onboard ESA JUICE mission
A. Retinò, M. Mansour, T. Chust, P. Canu, F. Sahraoui, O. Le Contel, D. Alison, G. Sou, L. Varizat, J.-D. Techer, A. Jeandet, N. Geyskens, M. Chariet, B. Cecconi, J.-E. Wahlund
- **47** - Imaging of energetic neutral atoms with the Jovian Neutral Atoms Analyser onboard JUICE: Expectations from charge exchange processes in Ganymede orbit
Maike Brigitte Neuland, Kazushi Asamura, Stas Barabash, Yoshifumi Futaana, Manabu Shimoyama, Martin Wieser
- **48** - The Jovian Plasma Dynamics and Composition Analyzer on JUICE
Martin Wieser, Stas Barabash
- **49** - Feasibility of the exploration of the subsurface structures and ionosphere of Jupiter's icy moons by interferences of Jovian radio waves
A. Kumamoto, Y. Kasaba, F. Tsuchiya, H. Misawa, H. Kita, W. Puccio, J. E. Wahlund, J. Bergman, B. Cecconi, Y. Goto, J. Kimura, and T. Kobayashi
- **50** - JUICE-UVS and Europa-UVS Science Synergies and Juno-UVS Pathfinding
Kurt D. Retherford, G. Randall Gladstone, Thomas K. Greathouse, Michael W. Davis
- **51** - Science objectives and implementation of Software-type Wave-Particle Interaction Analyzer (SWPIA) by RPWI for JUICE
Y. Katoh, H. Kojima, K. Asamura, Y. Kasaba, F. Tsuchiya, Y. Kasahara, T. Imachi, H. Misawa, A. Kumamoto, S. Yagitani, K. Ishisaka, T. Kimura, M. Hikishima, Y. Miyoshi, M. Shoji, M. Kitahara, O. Santolik, J. Bergman, W. Puccio, R. Gill, M. Wieser, W. Schmidt, S. Barabash, and J.-E. Wahlund
- **52** - The Jovian Energetic Neutral Analyzer for the Particle Environment Package onboard JUICE
Manabu Shimoyama, Martin Wieser, Stas Barabash, Kazushi Asamura, Stefan Karlsson, Maike Brigitte Neuland, Yoshifumi Futaana
- **53** - HST observations of variations in Ganymede's oxygen atmosphere and aurora
P. M. Molyneux, J. D. Nichols, N. P. Bannister, E. J. Bunce, J. T. Clarke, S. W. H. Cowley, J.-C. Gérard, D. Grodent, S. E. Milan and C. Paty
- **54** - Jovian Plasma Interactions with Europa's Exosphere
John Hale, Carol Paty, Alexia Payan, Frank Crary, Ayanna Jones
- **55** - Multi-fluid MHD modeling of Europa's variable interaction with Jupiter's magnetosphere
Camilla Harris, Xianzhe Jia, James Slavin, Martin Rubin, Gábor Tóth
- **56** - Interaction of Europa with Jovian Plasma Torus: Multi-species Hybrid Simulations
Ondřej Šebek, Pavel Trávníček, Petr Hellinger
- **57** - Plasma interaction at Io: Multi-species hybrid simulations
Ondřej Šebek, Pavel Trávníček, Raymond Walker, Petr Hellinger
- **58** - Neutral loss at Europa and Io
Vincent Dols, Fran Bagenal, Frank Crary
- **59** - Modeling the response of the Io plasma torus to hot electron modulation and volcanic eruptions
Drew Coffin, Peter Delamere
- **60** - Cassini UVIS Observations of Io's Extended Neutral Cloud
Andrew J. Steffl
- **61** - Response of Jupiter's inner magnetosphere to the solar wind derived from 3-years observation by

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Go Murakami, Kazuo Yoshioka, Tomoki Kimura, Atsushi Yamazaki, Fuminori Tsuchiya, Chihiro Tao, Hajime Kita, Masato Kagitani, Yasumasa Kasaba, Ichiro Yoshikawa, and Masaki Fujimoto

- **62** - Io in Silhouette: Mapping Io's SO₂ atmosphere during Jupiter transit events
Tracy M. Becker, K. D. Retherford, L. Roth, L. Feaga, C. C. Tsang, K. L. Jessup, C. Grava
- **63** - Europa's Hydrogen Corona in a Large Set of HST Lyman-Alpha Images
Sofia Bergman, Lorenz Roth, Nickolay Ivchenko
- **64** - On the orbital variability of Ganymede's and Europa's atmospheres
Francois Leblanc, Apurva Oza, Robert E. Johnson, Ludivine Leclercq, Carl Schmidt, Ronan Modolo, Jean-Yves Chaufray, Tim Cassidy
- **65** - Ganymede's atomic hydrogen atmosphere and surface reflectivity in HST/STIS Lyman- α images
Juan Alday, Lorenz Roth, Nickolay Ivchenko, Tracy M. Becker, Kurt D. Retherford, Joachim Saur
- **66** - 3D Hall MHD-EPIC Simulations of Ganymede's magnetosphere
Hongyang Zhou, Gabor Toth, Xianzhe Jia
- **67** - Callisto plasma interactions - now with an ionosphere
Jesper Lindkvist, Mats Holmström, Krishan K. Khurana, Maria Hamrin
- **68** - Plasma Interaction and Energetic Particle Dynamics near Callisto: A Case Study of the Galileo C10, C21, and C23 Flybys
Lucas Liuzzo, Sven Simon, Moritz Feyerabend, Uwe Motschmann