

ICS8 at a Glance

Sunday	15:00-19:00	Registration & Orientation
	19:00-	Reception with Crazy Bones String Band
Monday	08:15-08:30	Opening Remarks and Welcome
	08:30-12:00	Overview & “Where are we now?”
	12:00-13:00	Lunch
	13:00-16:30	Role of Local Processes
	16:30-	Poster Session 1
Tuesday	08:30-12:00	Sequence of Events and Causality
	12:00-13:30	Lunch
	13:30-17:00	Sequence of Events and Causality
	17:00-	Poster Session 2 & GBO Tour
	19:45-	Reception & Best of the Banff Mountain Film Festival
Wednesday	08:20-11:50	Ground-Satellite Investigations
	Afternoon	Off – Outdoor Activities Break
Thursday	08:30-12:00	External Control of Substorm Trigger and Development
	12:15-13:20	Lunch
	13:20-14:25	Inner Magnetosphere
	14:25-16:30	Ionosphere & MI Coupling
	16:30-	Poster Session 3
	19:00-	Reception & Banquet
Friday	08:30-09:30	Ionosphere & MI Coupling
	09:30-11:50	Complexity & Nonlinear Dynamics
	11:50-13:10	Lunch
	13:10-15:30	Substorms at Other Planets
	15:35-17:00	Where are we going?
	17:00-17:10	Closing Remarks
	17:10-	Reception

Discussions

Monday AM	Overview Session	<i>Sibeck</i>
Monday PM	Local Processes	<i>Pulkkinen</i>
Tuesday PM	Sequence & Causality	<i>Reeves & Yahnin</i>
Wednesday AM	Ground-Satellite Investigations	<i>Angelopoulos & Sergeev</i>
Thursday AM	Trigger & Development	<i>Henderson</i>
Thursday PM	Inner Magnetosphere; MI	<i>Goldstein & Østgaard</i>
Friday AM	MI; Complexity	<i>Uritsky & Freeman</i>
Friday PM	Substorms at Other Planets	<i>Brandt</i>
Friday PM	Future ICS Meetings	<i>Nakamura</i>
Friday PM	Where are we now – Revisited	<i>Siscoe & Slavin</i>

All events, talks, & posters are in the Max Bell Pavilion

* indicates invited talk

Monday Morning

CHAIR: Cully

08:15 Welcome & Opening Remarks
Eric Donovan, William Liu, and Sandy Murphree

→Where are we now?

08:30* Substorm research: A biography with a moral
George Siscoe

08:50* The Substorm-Reconnection Connection
Jim Slavin

09:10* Outstanding issues about substorm onset: Revisit to fundamental features
Shin Ohtani

09:30* Role of instabilities in substorms
Alain Roux, O. Le Contel, D. Fontaine, P. Robert, P. Louarn, J. Sauvaud, and A. Fazakerley

09:50 Break

10:10 Observational signatures of self-organized critical behavior of multiscale geomagnetic disturbances,
Vadim Uritsky and Alexander J. Klimas

10:25* Fast flow, dipolarization, and substorm evolution: Cluster/Double Star multipoint observations
Rumi Nakamura, T. Takada, M. Volwerk, W. Baumjohann, T. L. Zhang, Y. Asano, A. Runov, Z. Voeroes, C. Carr, A. Balogh, E. Lucek, B. Klecker, H. Reme O. Amm

10:45* Flux transport in the Dungey cycle: A survey of dayside and nightside reconnection rates,
Steve Milan, Gabrielle Provan, Benoit Hubert

11:05* Understanding the relationship of Storms, SMC and Sawtooth events in the Magnetosphere through Numerical Simulations,
Chuck Goodrich

11:25 Ionospheric Input to the Magnetotail During Substorms,
Lynn Kistler, C. Mouikis, X. Cao, H. Frey, B. Klecker, I. Dandouras, G. Parks, and R. Friedel

11:40 Discussion
David Sibeck

12:00 Lunch

March 27th 2006

CHAIR: Kavanagh

➔ Role of local processes

- 13:00* Low frequency fluctuations of the plasma sheet – CLUSTER observations and models
Philippe Louarn, G. Fruit, E. Budnik, J. Sauvaud, C. Jacquey, E. Lucek, and the CDPP, CIS, and FGM teams
- 13:20* Thin current sheets as part of the substorm process
Tuija Pulkkinen
- 13:40 Kinetic balance of the pre-breakup thin current sheet,
Chris Cully, Bob Ergun, Dan Baker, Anders Eriksson, Erik Engwall, Elizabeth Lucek, Melvyn Goldstein, Harald Kucharek, Chris Mouikis
- 13:55* Formation of the thin current sheets in substorms and its relation to the magnetic reconnection
Yoshihiro Asano, R. Nakamura, A. Runov, W. Baumjohann, T. Takada, I. Shinohara, A. Balogh, B. Klecker, and H. Reme
- 14:15 EISCAT radar and optical studies of black aurora: a signature of magnetospheric turbulence?
Mike Kosch, B. Gustavsson, E. Blixt, T. Pedersen, A. Senior, A. Kavanagh, and J. Semeter
- 14:30 Break
- 14:50* Review of Kinetic Instabilities Associated with Substorms
Wendell Horton, J-H Kim, J. C. Perez, and H. V. Wong
- 15:10 Onset of substorm expansion phase: Theory predictions and results of experimental observations,
Elizaveta Antonova
- 15:25* Role of Nonlinear Ballooning Modes and Collisionless Reconnection at Substorm Onset,
Amitava Bhattacharjee, L.-J. Chen, M. Fillingim, K. Germaschewski, L. Kistler, R. Lin, Z. W. Ma, C. Mouikis, G. Parks, K. Sigsbee, and P. Zhu
- 15:45 Small scale Cluster observations of current sheet disruptions during substorm,
Olivier Le Contel, F. Sahraoui, A. Roux, D. Fontaine, P. Robert, J.-A. Sauvaud, C. Owen, and A. Fazakerley
- 16:00 Discussion
Tuija Pulkkinen
- 16:30 Poster Session

→ Sequence of Events and Causality

- 08:30 The dependence of magnetospheric topology and convection properties (including reconnection) on flux-transfer rates
Gerry Atkinson
- 08:45* SuperDARN observations of the global response of ionospheric convection to magnetospheric substorms,
Adrian Grocott
- 09:05 Image analysis and modelling of substorm onsets,
James Wanliss and G. Rostoker
- 09:20 Global survey of the isotropic boundary during substorm expansive phase,
Matthieu Meurant, E. Donovan, B. Hubert, C. Blockx, J.-C. Gérard, E. Spanswick, I. Voronkov, T. Trondsen
- 09:35 Substorm studies with Cluster and Double Star,
Andrew Fazakerley, A. Marchaudon, I Alexeev, C Owen, A Lahiff, R Wilson, A Walsh, C Carr, E Lucek, H Reme, H Frey, J Watermann
- 09:50* Cluster observations during pseudo-breakups and substorms
Andrei Runov, I. Voronkov, Y. Asano, W. Baumjohann, R. Nakamura, M. Volwerk, A. Balogh and H. Reme
- 10:10 Break
- 10:30* Features of magnetosphere-ionosphere coupling at breakups and onset inferred from in situ and ground-based multi-instrument alignment,
Igor Voronkov, A. Runov, A. Koustov, K. Kabin, M. Meurant, E. Donovan, C. Bryant, and E. Spanswick
- 10:50 Mesoscale observations of energy dissipation in the ionosphere during substorms
Kirsti Kauristie, Sanna Mäkinen, Noora Partamies and Ritva Kuula
- 11:05 Westward Traveling Surge
Walter Heikkila
- 11:20 Substorm onsets as observed by IMAGE-FUV
Harald Frey and Stephen Mende
- 11:45 Evolution of the Magnetospheric Substorm in the Framework of the Double Oval
Gordon Rostoker
- 12:00 Lunch

CHAIR: Wanliss

➔ Sequence of Events and Causality - continued

- 13:30 Convection vortices in pre- and post-midnight sector during magnetospheric substorms,
Jun Liang, George Sofko, and Eric Donovan
- 13:45* Substorm aurora and processes in the near-Earth magnetotail,
Alexander Yahnin
- 14:05 Impossibility of Calculating Magnetic Field Change From Current Disruption
Vytenis Vasyliunas
- 14:20 Ground Based Observations of Dispersionless Electron Injections
Emma Spanswick, E. Donovan, R. Friedel, and A. Korth
- 14:35 Magnetotail plasma sheet energetic electron (>40 keV) response to substorms
Arne Aasnes, R. Friedel, G. Reeves, B. Lavraud, L. Kistler, H. Frey, and P. Daly
- 14:50 Break
- 15:10 What causes substorm growth phase dropouts?,
Geoff Reeves, Y. Chen, R. Friedel, T. Pulkkinen, and M. Henderson
- 15:30 Global ULF Wave Energy Transport in the Magnetosphere
I. Jonny Rae, I. Mann, E. Donovan, F. Fenrich, C. Watt, D. Milling, M. Lester, B. Lavraud, J. Wild, H. Singer, H. Reme, and A. Balogh
- 15:45 Automatic classification of auroral images in substorm studies
Mikko Syrjäsuo and Eric Donovan
- 16:00 Substorm timing using Pi1B pulsations observed with CARISMA,
David Milling and Ian Mann
- 16:15 Discussion
Geoff Reeves & Alexander Yahnin
- 17:00 Poster Session & GBO Tour (for those interested)

➔ Best of Banff Mountain Film Festival

- 19:45 Reception
- 20:15 Special ICS8 Screening

→ Coordinated Ground-Satellite Investigations

- 08:20* Challenges of Multi-spacecraft Missions to End the Substorm Controversy
Robert McPherron
- 08:40 Meeting the Modellers Half Way: Maximising the Potential of Ground
Observations for Substorm Studies,
David Boteler
- 08:55* Relationship of magnetic reconnection and injections/dipolarizations
*Victor Sergeev, M. Kubyshkina, S. Apatenkov, A. Runov, W. Baumjohann, R.
Nakamura, T. Zhang, H. Eichelberger, A. Fazakerley, C. Owen, J.-A.
Sauvaud, P. Daly, J. Cao, H. Frey, E. Georgescu, K. H. Glassmeier, K.-H.
Fornacon, H. Singer, G. Reeves, E. Donovan, I. Mann*
- 09:15* Radiation Belt Science in the THEMIS Era,
Ian Mann
- 09:35 The nature of Pi1B pulsations observed in space,
*Marc Lessard, Barrett Rogers, Hyomin Kim, Mark Engebretson, Allan
Weatherwax, Jennifer Posch, and Melissa Geddes*
- 09:50 Break
- 10:05 Characterizing the Classical Auroral Substorm: UV Emissions,
Jesper Gjerloev, R. Hoffman, J. Sigwarth, and L. Frank
- 10:20 Ground and satellite observations of substorm onset arcs,
*Kazuo Shiokawa, K. Yago, K. Yumoto, K. Hayashi, D. Baishev and S.
Solovyev, F. Rich, and S. Mende*
- 10:35 Azimuthal Extent of Substorm Expansive Phase Onset,
Eric Donovan, B. Jackel, E. Spanswick, S. Mende, and V. Angelopoulos
- 10:50* Relating Plasma Instabilities in the Magnetotail to Observables
Tony Lui
- 11:10* Open questions on substorms and the upcoming panoply to address them
Vassilis Angelopoulos
- 11:30 Discussion
Vassilis Angelopoulos and Victor Sergeev
- 11:50 Break for Free Afternoon

➔ External Control of Substorm Trigger and Development

- 08:30* Monitoring the dayside and nightside reconnection rates during various auroral events using IMAGE-FUV and SuperDARN data
Benoit Hubert, M. Palmroth, S. E. Milan, A. Grocott, P. Janhunen, K. Kauristie, S.W.H. Cowley, T. I. Pulkkinen and J.-C. Gérard
- 08:50 On the role of entropy conservation and entropy loss governing substorm phases,
Joachim Birn, Michael Hesse, and Karl Schindler
- 09:05* Substorm convection patterns observed by the Super Dual Auroral Radar Network
Bill Bristow
- 09:25* Relation of Substorm Disturbances Triggered by Abrupt Solar-Wind Changes to Physics of Plasma Sheet Transport,
Larry Lyons, Dae-Young Lee, Chih-Ping Wang, Steven Mende
- 09:45 Substorm onset location and the Harang discontinuity,
James Weygand, O. Amm, R. McPherron, K. Kauristie, A. Koistinen, and H. Frey
- 10:00 Break
- 10:15* What Triggers Sawtooth Substorms and What Sets their Periodicity?
Michael Henderson
- 10:35 Polar Spacecraft Observations Near 9 RE: Rapid Multiple Dipolarizations and their Interpretation,
Yasong Ge and C. T. Russell
- 10:50 Repetitive substorms caused by Alfvénic waves of the interplanetary magnetic field during high-speed solar wind streams,
Dae Young Lee, L. Lyons, K. Kim, J.-H. Baek, K.-H. Kim, H.-J. Kim, J. Weygand, Y.-J. Moon, K.-S. Cho, and Y. Park
- 11:05 Observations of tail dynamics using ground and space based instruments during a period of multiple substorms,
Colin Forsyth, M. Lester, S. E. Milan, A. Grocott, H. Frey, E. Lucek, H. Reme, J. Watermann
- 11:20 Geomagnetic field disturbances and solar wind effects during storm-time periodic substorms
Chaosong Huang
- 11:35 Discussion
Michael Henderson
- 12:00 Lunch

March 30th 2006

CHAIR: Le Contel

➔ **The Inner Magnetosphere**

- 13:20* Review of conclusions of storm-substorm workshop
Joe Kan
- 13:30* The Magnetotail-Driven Inner Magnetosphere,
Jerry Goldstein, B. Sandel, S. Mende, P. Brandt, M. Thomsen, M. Hairston
- 13:50* MHD/Particle Simulations of Substorm Injection of Energetic Ions and
Electrons into the Inner Magnetosphere,
Scot Elkington and Michael Wiltberger
- 14:10 Multi-satellite observation of plasma injection/dipolarization in the inner magnetosphere
*Sergey Apatenkov, V. Sergeev, M. Kubyshkina, R. Nakamura, W.
Baumjohann, I. Alexeev, A. Fazakerley, H. Frey, P.W. Daly, S. Muhlbacher,
J.-A. Sauvaud, A. Runov, N. Ganushkina, T. Pulkkinen, and G.D. Reeves*

➔ **The Ionosphere & MI Coupling**

- 14:25* Simultaneous observations of ions of ionospheric origin over the ionosphere
and in the plasma sheet at storm-time substorms
*Masahito Nose, T. Kunori, Y. Ono, S. Taguchi, K. Hosokawa, T. Moore, M.
Collier, S. Christon, and R. McEntire*
- 14:45 Break
- 15:00 On the Role of O⁺ on Magnetic Reconnection in the Earth's Magnetotail
*Christopher Mouikis, L. Kistler, M. Shay, B. Klecker, H. Reme, I.
Dandouras, and E. Lucek*
- 15:15 Auroral Secondary Ions in the Inner Magnetosphere,
George Sofko, Masaz Watanabe, and Robert Schwab
- 15:30* Analysis of mesoscale ionospheric substorm signatures,
Olaf Amm, O., A. Aikio, H.U. Frey, R. Nakamura and H. Vanhamäki
- 15:50* Conjugate imaging of substorms
Nikolai Østgaard, S. Mende, H. Frey, J. Sigwarth, and A. Aasnes
- 16:05 Discussion
Jerry Goldstein & Nikolai Østgaard
- 16:30 Poster Session
- 19:00 **Reception & Banquet**

➔ The Ionosphere & MI Coupling - continued

- 08:30 Ionospheric dynamics of substorms and IMF control
Anita Aikio, Timo Pitkänen, Olaf Amm and Alexander Kozlovsky
- 08:45 Proton precipitation during substorm growth phase observed by IMAGE-FUV: a case study
Valerie Coumans, Jean-Claude Gerard, Caroline Blockx, and Benoit Hubert
- 09:00 The Association of Substorm Chorus Events with Drift Echoes
Gary Abel, M. Freeman, A. Smith, and G. Reeves
- 09:15 Alfvén wave produced auroras during substorms,
Stephen Mende, H. Frey, and C. Carlson

➔ New frontiers - Complexity & Nonlinear Dynamics

- 09:30* Auroral complexity and the substorm
Mervyn Freeman
- 09:50 Substorm expansion as an avalanche phenomenon,
William Liu, Eric Donovan, Paul Charbonneau, and John Manuel
- 10:05 The role of random fluctuations in the magnetosphere-ionosphere system: a dynamic stochastic model for the AE-index variations,
Antti Pulkkinen., A. Klimas, D. Vassiliadis, and V. Uritsky
- 10:20 Break
- 10:35* Nonlinear dynamics in the magnetosphere,
Daniel N. Baker, A. Klimas, D. Vassiliadis, and V. Uritsky
- 10:50 Modeling the self-organized critical behavior of the plasma sheet reconnection dynamics
Alex Klimas, Vadim Uritsky and Dan Baker
- 11:05 Scaling collapse and structure functions in TV data of substorm-time aurora,
Boris Kozelov and K. Rypdal
- 11:20 Discussion
Vadim Uritsky and Mervyn Freeman
- 11:50 Lunch

CHAIR: Kauristie

➔ **New frontiers – Substorms at Other Planets**

- 13:10 The magnetotails of Mercury, Earth, Jupiter, and Saturn
Steve Milan
- 13:25* The Dayside Magnetosphere of Mercury
Stefano Massetti
- 13:45* Solar wind-magnetosphere coupling and auroral Signature
Jean-Claude Gérard and D. Grodent
- 14:05* Global perspective on storm-substorm relationship at Earth and beyond
Pontus C. Brandt, Donald. G. Mitchell, S. M. Krimigis
- 14:25* On magnetospheric substorms at Mercury
Dominique Delcourt, K. Seki and N. Terada
- 14:55 Discussion
Pontus Carlson Brandt
- 15:15 Break

➔ **Where do we go from here?**

- 15:35* Magnetospheric Multiscale Mission Overview
Jim Burch
- 15:55 How should ICS evolve? & Invitation to ICS9 in Graz
Rumi Nakamura
- 16:10 Where are we now? – Where are we going?
George Siscoe and Jim Slavin
- 17:00 Closing Remarks
Eric Donovan
- 17:10 Reception

Posters – Max Bell Pavilion Room 251

We ask that posters are put up before 8:30 on the day of the meeting. The poster-board dimensions are 120 cm vertical by 180 cm horizontal (4' X 6'). We ask that Session 1 posters be taken down by 08:30 Tuesday morning, and Session 2 posters be taken down by 08:30 Thursday morning. If you wish to switch poster sessions, or for your poster to stay up longer, then please contact Eric Donovan directly and in advance.

Poster Session 1 - Monday

Three dimensional model of a substorm

Walter J. Heikkila

Multifractional Brownian motion models of substorms,

James Wanliss and Dario Cersosimo

Substorms, poleward boundary activations and geosynchronous particle injections during sawtooth events,

Michael Henderson

Issues surrounding the stability of the plasma sheet during the late growth phase

Peter Dobias, J. Wanliss, and J. Samson

FUV remote sensing of the proton isotropy boundary and magnetotail stretching during growth phases

Caroline Blockx, J.-C. Gérard, V. Coumans, B. Hubert, and M. Meurant

A study of magnetosphere - ionosphere reconnection during night-time absorption spike events

Amin Aminaei and Farideh Honary

Dayside electron precipitation following substorm onsets,

Andrew Kavanagh and Farideh Honary

Preliminary study of energetic particles embedded in magnetic structures observed in the near Earth plasmasheet

Suiyan Fu, Q.-G. Zong, Z.Y. Pu, A. Korth and P. W. Daly

Effects of the Fast Plasmasheet Flow on the Geosynchronous Magnetic Configuration: Geotail and GOES Coordinated Study,

Shin Ohtani, H. Singer, and T. Mukai

Spatio-temporal dynamics of substorms during intense geospace storms

Surja Sharma and Jian Chen

ULF waves associated with a storm sudden commencement: Cluster observations,

Tommy Eriksson, L. Blomberg, S. Schaefer, and K.-H. Glassmeier

Time history effects at the magnetopause: Hysteresis in power input

Minna Palmroth, Pekka Janhunen, and Tuija Pulkkinen

Time history effects at the magnetopause: Implications to substorm processes

Tuija Pulkkinen, M. Palmroth, E. Tanskanen, P. Janhunen, H. Koskinen, and T. Laitinen

Ring Current Injection Conjecture: Ring Current Intensity Increases with X-Line Formed Closer to Earth in the Plasma Sheet

Joseph R. Kan, J. L. Burch, W. Sun, Y. Miyashita, and J. Goldstein

MIC-NEXL Model of Substorms

Joseph R. Kan, William Bristow, A. Ieda, Y. Miyashita

Ground-based radar detection of the equatorward boundary of ion auroral oval in the dusk-midnight sector and its dynamical association with substorms

Thayyil Jayachandran, J. W. MacDougall, and E. F. Donovan

Interpretation of Automated Forward Modeling Parameters for Sawtooth Events and Substorms

Martin Connors, R. McPherron, and R. Clauer

Externally Triggered near-Earth Breakup.

Igor Voronkov

SuperDARN and IMAGE WIC Observations during intervals of Steady Magnetospheric Convection

McWilliams, K. A., J. B. Pfeifer, R. L. McPherron, and H. U. Frey

Effects of pressure gradients and convection on the inner plasma sheet

Prosolin, Victor, Igor Voronkov, and Eric Donovan

Long-term variations of the precipitation boundary b2i

Yahnina, T.A., A.G. Yahnin, D.A. Yahnin, P.T. Newell, and T. Sotirelis

Flux-Tube Depletions During Substorms

Erickson, Gary M., Alena Savoie, Richard A. Wolf and Stanislov Sazykin

Are we on the right approach to solve the substorm problem?

Heikkila, Walter J

Poster Session 2 - Tuesday

Multi-spacecraft measurements of magnetospheric substorms and their implications for the near-Earth neutral line model,

Daniel N. Baker, Nathan Farr and T. I. Pulkkinen

Pi2 pulsation periodicity: Local field line resonances or variations in magnetotail flows?

Andy Kale, I. R. Mann., and K. Murphy

An attempt to locate substorm onsets using Pi1 signatures

Viacheslav Pilipenko, I. Tchebotareva, M. Engebretson, J. Posch, A. Rodger, and P. Ponomarenko

Automated detection of Pi2 pulsations to monitor substorm signatures: Its application to real-time data and archived data

Masahito Nosé, T. Iyemori, M. Takeda, T. Kamei, F. Honary, S. Marple, J. Matzka, T. Ookawa, K. Takahashi, B. Toth, and G. Cifuentes-Nava

NORSTAR and THEMIS

Brian Jackel, Eric Donovan, Trond Trondsen, Emma Spanswick, Mikko Syrjäsuo, Igor Voronkov, Noora Partamies, Thayyil Jayachandran, Leroy Cogger, Fokke Creutzberg, Don Wallis, David Knudsen, Hercules Olivier, and Zane Kryzanowsky

Statistical Analysis of IMF Substorm Triggers Using Multi-Satellites Observations

Tung-Shin Hsu and R. L. McPherron

Dayside Convection Changes Observed by SuperDARN during Sawtooth Events

Shasha Zou, L. Lyons, A. Boudouridis, and J. M. Ruohoniemi

Towards a synthesis of substorm electrodynamics: HF radar and auroral observations,

Adrian Grocott, M. Lester, M. Parkinson, T. Yeoman, P. Dyson, and H. Frey

Substorm on March 26, 2004 observed from the ground and from the space: case study

Boris Kozelov, T. Kozelova, and L. Borovkov

Decrease in Bz prior to the dipolarization in the near-Earth plasma sheet

Kazuo Shiokawa, Y. Miyashita, I. Shinohara, and A. Matsuoka

Expansion of substorm disturbances into the polar cap

R. Lukianova

Plasmasheet Expansion: Statistical Characteristics

Shin Ohtani and T. Mukai

Strong stretching in dusk sector: stormtime substorms and sawtooth events compared,

Noora Partamies, Tuija I, Pulkkinen, Eija I, Tanskanen, Geoff D, Reeves, Eric Donovan, Howard J, Singer, James A. Slavin

The THEMIS All-Sky Imager Program

Eric Donovan, Stephen Mende, Brian Jackel, Harald Frey, Mikko Syrjäsuo, Stu Harris, Mike Greffen, Laura Peticolas, Igor Voronkov, Trond Trondsen, Noora Partamies, Martin Connors, and Vasilis Angelopoulos

Five plus four equals nine: combining the THEMIS and Cluster missions

Jim Wild

Initial observations by the STEL all sky imager at Athabasca in Canada

Aki Ieda, K. Shiokawa, K. Sakaguchi, Y. Miyoshi, Y. Otsuka, T. Ogawa, K. Hosokawa, M. Connors, and E. Donovan

Observations of nightside magnetic reconnection during substorm growth and expansion phases

Mai Mai Lam, Mike Pinnock, and Eric Donovan

Global Ring-Current Response to Storm-Substorms

Pontus C. Brandt, M. -C. Fok, S. Ohtani, D. G. Mitchell, D. C. Delcourt

Characteristics of optical and CNA arcs observed before auroral breakup

Tanaka, Y.-M., M. Kubota, M. Ishii, Y. Monzen, Y. Murayama, H. Mori, and D. Lummerzheim

Correlation of whistler wave characteristics with field and particle measurements at substorm current sheets

Chen, Li-Jen, Ondrej Santolik, Amitava Bhattacharjee, Chris Mouikis, Edita Georgescu, Jolene Pickett, Harald Kucharek, Bertrand Lefebvre, and Patrick Daly

The sub-storm as revealed by the EISCAT radars

Stromme, Anja

Substorm effect on ground observations of signatures of the ionospheric Alfvén resonator

Semenova, N.V., A.G. Yahnin

Poster Session 3 - Thursday

Characterizing the Classical Auroral Substorm: Ground magnetic field perturbations,

Jesper Gjerloev, R. Hoffman, J. Sigwarth, and L. Frank

Depletion of Electrons in a Multiple Substorm Event,

Chad Bryant, J. S. Murphree, E. Donovan and S. B. Mende

Magnetospheric energy budget during huge geomagnetic activity

Lisa Rosenqvist, S. Buchert, H. Opgenoorth, A. Vaivads, and G. Lu

A new method of magnetic storm forecasting on the basis of solar wind data,

O. Khabarova, O., V. Pilipenko, M. Engebretson, and E. Rudenichik

On the role of nonmaxwellian forms of distribution functions in the process of acceleration of auroral particles

N. Ermakova, E. Antonova

Ion pressure profiles during substorm

Simon Wing, J. W. Gjerloev, and R. A. Hoffman

Cluster plasma sheet observations and injections at geosynchronous orbit during corotating high speed streams

Axel Korth, M. Fränz, E. Echer, F. Guarnieri, R. Friedel, and H. Reme

Modeling Framework for ULF Wave-Particle Interactions

Maria Usanova, R. Sydora, and I. Mann

Observing the MLT and L-shell dependence of ground magnetic signatures of the ionospheric Alfvén resonator

Adrienne Parent and I. Mann

Auroral boundary observations by METEOR 3M auroral satellite,

M. Riazantseva, E. Antonova, B. Marjin, V. Hoteenkov, M. Saveliev, V. Feigin

High energy ion bursts and their role in the substorm evolution,

L. Lazutin, T. Kozelova, and B. Kozelov

Equatorial distributions of the plasma sheet ions, their electric and magnetic drifts, and magnetic fields under different IMF Bz conditions

Chih-Ping Wang, Larry Lyons, James Weygand, Tsugunobu Nagai, and Richard McEntire

- Alternating bursts of low energy ions and electrons near the substorm onset,
T. Kozelova, L. Lazutin, B. Kozelov, N. Meredith, and M. Danielides
- Storm-time and substorm cold plasma dynamics
Zoë Dent and Ian Mann
- ``Matreshka" model of multilayered current sheet
Lev Zelenyi, S. Sharma, H. Malova, V.Yu. Popov, D. Delcourt, and N. Ganushkina
- ICESTAR - A connection between IHY and IPY
Kirsti Kauristie, R. Harrison, R. Stamper, A. Weatherwax, V. Papitashvili, E. Donovan, and the ICESTAR and IHY Teams
- Electron precipitation power during substorm: DMSP F6 and F7 spacecraft observations,
V. Vorobjev and O. Yagodkina
- Scaling of electric field fluctuations associated with the aurora
Boris Kozelov and I. Golovchanskaya
- The substorm response of the high-latitude surface geomagnetic field to solar wind input parameters, as modeled from meridional array measurements
Vassiliadis, Dimitri, Antti Pulkkinen, Alexander Klimas
- Convection in the Earth's Magnetotail
Baumjohann, W., and R. Nakamura
- Finalizing the Digital Imaging Riometer at Andøya (AIRIS), Norway.
Kolbjorn Bekkelund, Peter Chapman, and Steve Marple
- A characterisation of ionospheric velocity from small to global scales.
Abel G., M. P. Freeman, G. Chisham and N. W. Watkins