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

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

Monday Afternoon

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

Tuesday Morning

CHAIR: McWilliams

➔ **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. Gèrard, 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

Tuesday Afternoon

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

Wednesday Morning

CHAIR: Apatenkov

➔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

Thursday Morning

CHAIR: Rosenqvist

➔ **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. G\'erard*
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 Alfvenic 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

Thursday Afternoon

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, Maskaz 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**

Friday Morning

CHAIR: Elkington

➔ **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 Alfven 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 Freemany

11:50 Lunch

Friday Afternoon

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. Gèrard, 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 Alfven 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. Rudenchik

On the role of nonmaxwellian forms of distribution functions in theprocess 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.
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A characterisation of ionospheric velocity from small to global scales.
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