

Nov. 10 (Mon)			
8:30 AM	opening remarks		
	1.The role of substorm in geospace energetics		
8:45 AM	Why does the aurora flare up?	Akasofu, S.-I.	tutorial
9:45 AM	A missing variable in the solar wind-magnetosphere-ionosphere coupling studies	Sergeev, V.A. , D.A. Sormakov , and V. Angelopoulos	Invited
10:05 AM	Magnetic energy and internal energy for the expansion phase of auroral substorms	Kataoka, R., S. Fujita, and T. Tanaka	Oral
10:20 AM	Solar wind-magnetosphere coupling and magnetospheric response mechanisms: substorms, steady magnetospheric convection and sawtooth events	Walach, M.-T. , and S. E. Milan	Oral
10:35 AM	break		
11:00 AM	The role of the substorm in solar wind-magnetosphere-ionosphere coupling	Milan, S. E. , J. C. Coxon , L. B. N. Clausen , B. J. Anderson, and H. Korth	Invited
11:20 AM	Statistical characteristics of particle injections throughout the equatorial magnetotail	Gabrielse Christine, Vassilis Angelopoulos, Andrei Runov, and Drew L. Turner	Oral
11:35 AM	Thermospheric density perturbations in response to substorms	Clausen,L. B. N., S. E. Milan, and A. Grocott	Oral
11:50 AM	Session 1 Summary	Shiokawa, K.	
12:05 PM	lunch		
	2.The role of MHD and kinetic instabilities in substorms		
1:30 PM	The Role of Kinetic Instabilities in Plasma Sheet and Substorm	Pritchett, P. L.	Invited
1:50 PM	Possible link of drift wave in the near-Earth plasma sheet to preonset auroral arc	Motoba, T. and S. Ohtani	Oral
2:05 PM	Fine-scale electrodynamic structure behind auroral vortex street	Hosokawa, K. , S. E. Milan , M. Lester , A. Kadokura , and N. Sato	Oral
2:20 PM	A stereo observation of the rayed arc formation on the initial brightening of an auroral substorm	Sakaguchi, K. , K. Hosokawa, Y. Hiraki, Y. Ogawa, A. Kadokura, S. E. Milan, and M. Lester	Oral
2:35 PM	Auroral vortex street and Alfvén resonant modes related to the onset of substorm	Hiraki, Y.	Oral
2:50 PM	break		
3:20 PM	Coupling between reconnection and interchange instability	Birn, J., Y.-H. Liu, W. S. Daughton, M. Hesse, and K. Schindler	Invited
3:40 PM	Ionospheric flow structures associated with auroral beading at substorm auroral onset	Bea Gallardo-Lacourt, Y., Nishimura, L. R. Lyons, J. M. Ruohoniemi, E. Donovan, V. Angelopoulos, K. A. McWilliams, and N. Nishitani	Oral
3:55 PM	Growth of auroral arc structures through Alfvénic magnetosphere-ionosphere coupling	Watanabe, T.-H.	Oral
4:10 PM	The instability that drives the substorm onset arc	Rae, I.J., N. M. E. Kalmoni, C. E. J. Watt, K. R. Murphy, I. R. Mann, and H. U. Frey	Oral
4:25 PM	break		
4:55 PM	On the Lesser Known One-Hour Periodicity of Substorms	Keiling, A., M. M. Kuznetsova, M. Hesse, and V. Angelopoulos	Oral
5:10 PM	Destabilization of 2D magnetic current sheets by resonance with bouncing electron - a new theory	Fruit, G., A. Tur, P. Louarn, and Z. Ferret	Oral
5:25 PM	Characteristic Roles of Magnetic Reconnection to Magnetospheric Dynamics	Ogino, T.	Oral
5:40 PM	Session 2 Summary	Kadokura, A.	
5:55 PM	dinner		
7:30 PM	Poster Session 1		

Nov. 11 (Tue)			
	3. Substorm-related processes in the tail		
8:30 AM	Magnetospheric substorms as revealed by recent multi-spacecraft observations	Angelopoulos, V.	tutorial
9:30 AM	Evolution of the plasma jets in the near Earth magnetotail	Nakamura, R. , A. Alexandrova, D. Schmid, W. Baumjohann, M. Volwerk, and N. Kahr	Oral
9:45 AM	Current system around the dipolarization front and its relation to substorm current wedge: Multi-spacecraft observations	Pu,Z., Z.Yao, and J. Liu	Oral
10:00 AM	Asymmetric braking and downward diversion of dipolarization fronts: the ion reflection effects	Zhou, X.-Z., V. Angelopoulos, J. Liu, A. Runov, and D.-X. Pan	Oral
10:15 AM	break		
10:45 AM	ARTEMIS observations of plasmoids and related structures	Kiehas, S.A., Angelopoulos, V., Runov, A., and Li, S.-S.	Invited
11:05 AM	Magnetotail stretching and thinning in satellite and laboratory experiment	Petrukovich, A.A., A.V. Artemyev, E.V.Yushkov, A. G. Frank, and R. Nakamura	Oral
11:20 AM	Ionospheric ions during Pseudo-breakup auroras	Parks, G. K., E. S. Lee, M. Fillingim, Y. B. Cui and S. Y. Fu	Oral
11:35 AM	Favorable conditions for energetic ion and electron acceleration during magnetic reconnection	Imada, S., M. Hirai, and M. Hoshino	Oral
11:50 AM	Empirical modeling 3D force-balanced pressure and magnetic field structures during substorm growth phase	Yue, C., C-P Wang, S. Zaharia, L. Lyons, T-S Hsu, Y. Wang, X. Xing, M. Henderson, V. Angelopoulos, T. Nagai, and A.T.Y. Lui	Oral
12:05 PM	lunch		
1:30 PM	Plasma sheet low-entropy flow channels: high-resolution global MHD simulations using the LFM model	Merkin, V. G., M. Wiltberger, J. G. Lyon, and M. Sitnov	Invited
1:50 PM	Recent results on Geotail observations of magnetotail reconnection	Shinohara, I.	Invited
2:10 PM	Catapult Current Sheet Relaxation Model Confirmed by THEMIS Observations	Machida, S., Y. Miyashita, A. Ieda, M. Nosé, V. Angelopoulos, and J. P. McFadden	Oral
2:25 PM	Relative Timing of Substorm-Associated Processes in the Near-Earth Magnetotail and Development of Auroral Onset Arc	Miyashita, Y., A. Ieda, S. Machida, Y. Hiraki, V. Angelopoulos, J. P. McFadden, H. U. Auster, S. B. Mende, E. Donovan, and D. Larson	Oral
2:40 PM	Session 3 Summary	Runov, A.	
2:55 PM	break		

	4. ULF/ELF/VLF waves		
3:25 PM	Exploring substorms with ULF waves	Rae, I. J., K. R. Murphy, I. R. Mann, C. E. J. Watt, D. K. Milling, C. Forsyth, and N. M. E. Kalmoni	Invited
3:40 PM	Evidence for the acceleration of auroral electrons by shear Alfvén waves during substorm onset	Watt, C. E. J., I. J. Rae, A. P. Walsh, K. R. Murphy, H. U. Frey, R. Rankin, I. R. Mann, and A. N. Fazakerley	Oral
3:55 PM	Statistical study of Pi2 pulsations observed by the SuperDARN Hokkaido radar	Teramoto, M., and N. Nishitani	Oral
4:10 PM	Ionosphere-ground transition of Pi2 polarisation near the plasmapause	Ponomarenko, P.V., and C. L. Waters	Oral
4:25 PM	break		
4:55 PM	Interplanetary Alfvénic and ULF waves and their geomagnetic effects	Tanskanen, E.I., K. Snekvik, J. Guo, and R. Hynönen	Invited
5:15 PM	A Study of ULF Wave Excitation by Drift-Bounce Resonance due to Ion Injection into the Inner Magnetosphere	Seki, K., T. Amano, Y. Miyoshi, S. Saito, Y. Matsumoto, Y. Miyashita, K. Keika, and T. Umeda	Oral
5:30 PM	Pi1B pulsations observed on the ground and in space by GOES and THEMIS satellites at substorm onset	Lessard, M., Ge, Y. , Mouikis, C., Engebretson, M. J. and Singer, H. J.	Oral
5:45 PM	Session 4 Summary	Omura, Y.	
6:00 PM	dinner		
7:30 PM	Auroral research history from 1866 to today	Akasofu, S.-I.	Evening Talk

Nov. 12 (Wed)			
	5. Storm-substorm relationship		
8:30 AM	The Role of Substorms in Radiation Belt Particle Enhancements	Baker, D.N.	tutorial
9:30 AM	Spectrum characteristics of electromagnetic ion cyclotron triggered emissions and associated energetic proton dynamics	Shoji, M., and Y. Omura	Oral
9:45 AM	Importance of successive substorm activities to cause the large flux enhancement of the outer belt via chorus wave-particle interactions	Miyoshi, Y., and R. Kataoka	Oral
10:00 AM	SAMPEX observation of relativistic electron precipitations associated with diffuse auroras	Kurita, S., A. Kadokura, Y. Miyoshi, Y. Sato, H. Misawa, and A. Morioka	Oral
10:15 AM	break		
10:35 AM	Generatin Mechanism of Whistler-mode Chorus Emissions	Omura, Y.	Oral
10:50 AM	Simulation study of the generation mechanism of whistler-mode chorus and hiss-like emissions	Katoh, Y., and Y. Omura	Oral
11:05 AM	Magnetospheric substorms and the problem of the acceleration of relativistic electrons of the outer electron radiation belt	Antonova, E.E., I.P. Kirpichev, M.O. Riazantseva, V. O. Barinova, V. G. Vorobjev, O. I. Yagodkina, O.V. Kozyreva, V.V. Vovchenko, I.L. Ovchinnikov, and M.V. Stepanova	Oral
11:20 AM	Extremely Intense ELF Magnetosonic Waves During Substorms	Tsurutani, B., B. Falkowski, J. Pickett, O. Verkhoglyadova, O. Santolik, and G. Lakhina	Oral
11:35 AM	Relativistic (MeV) Electron Acceleration at Geosynchronous Orbit during Continuous Substorm/HILDCAA Events	Hajra, R., Bruce T. Tsurutani, Ezequiel Echer, and Walter D. Gonzalez	Oral
11:50 AM	Promotion on ICS-13 at New Hampshire	Lessard, M.	
12:00 PM	lunch		
1:00 PM	excursion		
7:00 PM	banquet		
Nov. 13 (Thu)			
8:30 AM	Multi-point Observations of Particle Injections During Storms and Substorms	Henderson, M. G.	Invited
8:50 AM	Energetic protons and oxygen ions observed by Van Allen probes/RBSPICE during storm-time substorms	Keika, K., K. Seki, M. Nosé, L. J. Lanzerotti, M. Gkioulidou, and A. Ukhorskiy	Oral
9:05 AM	The role of substorm in initiating the SMC periods	Dubyagin, S., and N. Ganushkina	Oral
9:20 AM	The Role of Plasmashell Injections in Ring Current Formation: Results from the Van-Allen Probes, THEMIS, Cluster and IMAGE	Brandt, P. C., M. Gkioulidou, A. Y. Ukhorskiy, V. G. Merkin, S. Ohtani, M. Sitnov, and D. G. Mitchell	Invited
9:40 AM	High latitude continuation of the ordinary ring current, storm-substorm dynamics and discrete auroral arcs	Antonova, E.E., V. G. Vorobjev, I. P. Kirpichev, O. I. Yagodkina, O.V. Kozyreva, V.V. Vovchenko, M.O. Riazantseva, M.S. Pulinetz, S.S.Znatkova, I.L. Ovchinnikov, I.A. Kornilov, T.A. Kornilova, and M.V. Stepanova	Oral
9:55 AM	Nightside Magnetospheric Current Circuit: Time Constants of the Solar Wind-Magnetosphere Coupling	Ohtani, S., and T. Uozumi	Oral
10:10 AM	Session 5 Summary	Fok, M.-C.	
10:25 AM	break		

	6. Interaction between the tail and the inner magnetosphere and		
10:50 AM	Coupling between flow bursts and waves that lead to substorm onset	Nishimura, Y., L. R. Lyons, M. J. Nicolls, D. L. Hampton, R. G. Michell, M. Samara, W. A. Bristow, E. F. Donovan, E. Spanswick, V. Angelopoulos, and S. B. Mende	Invited
11:10 AM	Substorm Pre-Onset and Onset: Progress and Near-Term Challenges in the THEMIS Era	Lynos, L., Y. Nishimura, Y. Zou ,B. Gallardo-Lacourt, V. Angelopoulos, A. Runov, and E. Donovan	Oral
11:25 AM	Characterizing the auroral substorm: A superposed epoch analysis of the aurora through the substorm growth and expansion phases	Murphy, K. R., Larry Kepko, C. E. J. Watt, I. J. Rae, D.G. Sibeck, Ian R. Mann, Eric Donovan, E. Spanswick, and B. Jackel	Oral
11:40 AM	Properties of localized polar cap flow enhancements and their connection to PBIs and substorms	Zou,Y., Y. Nishimura, L. R. Lyons, K. Shiokawa, E. F. Donovan, J. Michael Ruohoniemi, K. A. McWilliams, and N. Nishitani	Oral
11:55 AM	Evaluating the role of pre-onset streamers in substorm onset and development	Kepko, L.	Invited
12:15 PM	lunch		
1:30 PM	Recent progress in understanding of the interaction of the Plasmashell with the Inner Magnetosphere	Toffoletto, F. R., J. Yang, R. A. Wolf, and S. Sazykin	Invited
1:50 PM	Thermodynamic and Spectral Properties of the DFB/bubble Plasma Population in the Near-Earth Magnetotail	Runov, A., V. Angelopoulos, C. Gabrielse, J. Liu, D.L. Turner, and X.Z. Zhou	Oral
2:05 PM	Response of the Earths Distant Magnetotail to Varying Solar Wind Conditions	Sibeck, D. G.	Oral
2:20 PM	Tailward leap of magnetic reconnection: A THEMIS case study	Ieda, A., T. Nishimura, Y. Miyashita, and S. Machida	Oral
2:35 PM	Solar wind magnetosphere coupling during a long sequence of BBF's preceding substorm onset	Palin, L., C. Jacquay, H. Opgenoorth, M. Connors, J.-A. Sauvaud, and R. Nakamura,	Oral
2:50 PM	break		
3:15 PM	Effects of tailward retreat of oscillatory flow braking	Panov, E.V., R. Nakamura, W. Baumjohann, M.V. Kubyshkina, V.A. Sergeev, and V. Angelopoulos	Invited
3:35 PM	Substorm simulation 1: To what extent the substorm observation are reproduced numerically?	Ebihara, Y., T. Tanaka, T. Kikuchi, M. Den, and S. Fujita	Oral
3:50 PM	Substorm simulation 2: Growth phase convection and current generating the quiet arc	Tanaka, T., M. Den, S. Fujita, Y. Ebihara, T. Kikuchi, and K. Hashimoto	Oral
4:05 PM	Substorm simulation 3: Change of the plasma sheet force balance causing the sudden onset	M. Den, T. Tanaka, S. Fujita, Y. Ebihara, T. Kikuchi, and K. Hashimoto	Oral
4:20 PM	break		
4:45 PM	Connecting the Tail, Inner-Magnetosphere and Ionosphere with the Two-Way Coupled BATSRUS-CRCM-RBE Model	Fok, M.-C., N. Y. Buzulukova, A. Glocer, S.-H. Chen, E. A. MacDonald, B. J. Anderson, P. W. Valek, L. J. Lanzerotti, M. Gkioulidou, H. Spence, and P. Dixon	Oral
5:00 PM	Magnetosphere-Ionosphere Equilibrium Destabilisation Model: A New Substorm Onset Paradigm	Mann, I.R.	Oral
5:15 PM	Substorm Onset Process: Ignition of Auroral Acceleration and Related Substorm Phases	Morioka, A., Y. Miyoshi, Y. Kasaba, N. Sato, A. Kadokura, H.Misawa, Y. Miyashita, and I. Mann	Oral
5:30 PM	A quantitative measure of substorms	Frey, H. U.	Oral
5:45 PM	Session 6 Summary	Nakamura, R.	
6:00 PM	dinner		
7:30 PM	Poster Session 2		

Nov. 14 (Fri)			
	7. Non-Earth substorm-like features		
8:30 AM	MESSENGER Observations of Large Dayside Flux Transfer Events: Do They Drive Mercury's Substorm Cycle?	Imber,S. M. and J. A. Slavin	Invited
8:50 AM	Dynamic injections in the magnetospheres of the solar system	Mauk, B. H.	Invited
9:10 AM	Session 7 Summary	Sibeck, D.	
9:25 AM	break		
	8. Substorm currents and its dynamics		
9:55 AM	Large-scale field-aligned current dynamics during the substorm cycle	Clausen, L. B. N., S. E. Milan, J. B. H. Baker, J. M. Ruohoniemi, S. Wing, S. Ohtani, and B. J. Anderson	Invited
10:15 AM	Substorm Current Wedge in MHD Simulations	Birn, J., and M. Hesse	Oral
10:30 AM	The deformation of magnetospheric magnetic field by twin-loop Substorm Current Wedge	Nikolaev, A.V., V.A. Sergeev, M.V. Kubishkina, N.A. Tsyganenko, H. Singer, and V. Angelopoulos	Oral
10:45 AM	In-situ spatio-temporal measurements of the detailed azimuthal substructure of the substorm current wedge	Forsyth, C., A.N. Fazakerley, I .J. Rae, C.E.J. Watt, K. Murphy, J.A.Wild, T. Karlsson, R. Mutel, C.J. Owen, R. Ergun, A. Masson, M. Berthomier, E. Donovan, H.U. Frey, J. Matzka, C. Stolle, and Y. Zhang	Oral
11:00 AM	Combining Ground and Near Space Magnetic Measurements of the Substorm Current Wedge	Connors, M., R. L. McPherron, B. Anderson, H. Korth, C. T. Russell, and X. Chu	Oral
11:15 AM	Energy conversion processes for the magnetosphere-ionosphere coupling convection and sudden enhancement of a field-aligned current at the substorm onset	Fujita, S., T. Tanaka, Y. Ebihara, and M. Den	Oral
11:30 AM	On the Role of the Shape of the Magnetotail Current Sheet in the Substorm Triggering	Kubyshkina, M., V. Semenov, N. Tsyganenko, D. Kubyshkina, and N. Partamies	Oral
11:45 AM	Field aligned current study during the solar declining- extreme minimum of 23 solar cycle	Victor, N. Jeni, C. Panneerselvam, and C. P. Anil Kumar	Oral
12:00 PM	lunch		

1:30 PM	The Large-Scale Current System During Auroral Substorms	Gjerloev, J. W. and R. A. Hoffman	Invited
1:50 PM	Instantaneous analysis of ionospheric electrodynamic of a complete substorm bulge	Amm, O., A. Grocott, M. Lester, S. Milan, L. Kepko, R.L. McPherron, J. Weygand, R. Nakamura, V. Sergeev, S. Apatenkov, J. Birn, and T. Pulkkinen	Oral
2:05 PM	Spatiotemporal variations of eastward propagating auroral vortices observed during the substorm	Tanaka, Y., Y. Ogawa, A. Kadokura, H. Miyaoka, B. Gustavsson, N. Partamies, D. Whiter, U. Brändström, and C.-F. Enell	Oral
2:20 PM	Overshielding at Mid-Equatorial Latitudes during Storms and Substorms as Observed with SuperDARN, HF Doppler Sounder and	Kikuchi, T., K.K. Hashimoto, Y. Ebihara, Y. Nishimura, B. Veenadhari, T. Hori, N. Nishitani, I. Tomizawa and T. Nagatsuma	Oral
2:35 PM	Substorm electric fields at nightside low latitude observed by HF Doppler sounder	Hashimoto, K. K., T. Kikuchi, I. Tomizawa, and T. Nagatsuma	Oral
2:50 PM	break		
3:20 PM	Relationship between PC index and interplanetary electric field EKL under actual conditions of varying solar wind	Troshichev,O., and D. Sormakov	Oral
3:35 PM	Theta Aurora as an Energy Release in the Polar Cap Region	Obara, T. and T. Tanaka	Oral
3:50 PM	Dynamic morphology of dayside pulsating aurora observed at South Pole Station	Kadokura, A. , T. Motoba, Y. Ogawa, Y. Ebihara, and A. T. Weatherwax	Oral
4:05 PM	Electric Field Generation in the Geomagnetic Tail	Podgorny, A., S. Minami , and I. Podgorny	Oral
4:20 PM	Positive feedback between changes in the electrical conductivity of the ionosphere and the intensity of field-aligned currents during substorms	Mishin, V.V., V.M. Mishin, Y. Karavaev, Z.Y. Pu, C. Wang, S. Lunyushkin, and A. Moiseev	Oral
4:35 PM	Session 8 Summary	O. Amm	
4:50 PM	Concluding Remarks		