

## Tuesday

Poster Number	First Name	Last Name	Poster Title
<b>Focus Group: 00. General</b>			
Tue - 01	Katariina	Nykyri	Community Input Solicited for Heliophysics Decadal Survey Midterm Assessment Committee
<b>Focus Group: 03. Merged Modeling &amp; Measurement of Injection Ionospheric Plasma into the Magnetosphere (M312) and Its Effects -- Plasma Sheet, Ring Current, Substorm Dynamics</b>			
Tue - 02	Jason	Derr	Auroral beads indicate that shear flow-interchange instability in nightside magnetotail triggers substorm onset
Tue - 03	Mei-Yun	Lin	Determine the role of outflowing N <sup>+</sup> ions in the inner magnetosphere dynamics by tracking the different behavior of N <sup>+</sup> and O <sup>+</sup>
Tue - 04	Niloufar	Nowrouzi	ionospheric O <sup>+</sup> and H <sup>+</sup> outflow during CME- and SIR-driven sawtooth events
Tue - 05	George	Khazanov	Formation of the Potential Jump over the Geomagnetically Quiet Sunlit Polar Cap Region
Tue - 06	Sapna	Shekhar	Dynamic evolution of Neutral ion Spectra from TWINS during geomagnetic storm on 28-29th June 2013
Tue - 07	Jianghuai	Liu	Investigating the Effect of Inductive Electric Fields on the Dynamics of Ring Current Hot Ion Population
<b>Focus Group: 04. ULF wave Modeling, Effects, and Applications</b>			
Tue - 08	Beket	Tulegenov	Effects of the Hall Conductivity in the Ionospheric Heating Experiments
Tue - 09	Satoshi	Oimatsu	Chorus wave modulations due to ULF waves in the inner magnetosphere
Tue - 10	Mark	Engebretson	Nighttime magnetic perturbation events relevant to GICs observed in Arctic Canada: Statistical results and some next steps
Tue - 11	Aaron	West	Modeling the Evolution of Kinetic Field Line Resonances
Tue - 12	Shane	Coyle	An experimental approach to inter-hemispheric asymmetries in the ground magnetic response of magnetospheric ULF waves
Tue - 13	Feng	Shi	Probing the Response of Magnetosphere to Foreshock Waves Using 3-D Global Hybrid Simulations
Tue - 14	Xueling	Shi	Multi-point Analysis of Ionospheric Responses to Foreshock Transients using SuperDARN Radars
Tue - 15	Peter	Damiano	A comparison of electron dynamics within travelling and standing kinetic Alfvén waves in the inner magnetosphere
Tue - 16	Brett	McCuen	Characterizing Transient Geomagnetic Fluctuations and Associated Rapid Ionospheric Currents
Tue - 17	Brian	Kress	New Data from NOAA's First Plasma Instrument at Geosynchronous
Tue - 18	Eun-Hwa	Kim	Electron inertial effects on linearly polarized electromagnetic ion cyclotron waves at Earth's magnetosphere
Tue - 19	Eun-Hwa	Kim	Resonant mode conversion of Alfvén waves in the low-latitude boundary layer structured by Kelvin-Helmholtz instability
Tue - 20	Benjamin	Hogan	Alfvénic Heating of the F-region ionosphere
<b>Focus Group: 08. 3D Ionospheric Electrodynamics and Its Impact on the Magnetosphere-Ionosphere-Thermosphere Coupled System (IEMIT)</b>			
Tue - 21	Camilla	Harris	Multifluid MHD Simulations of Europa's Interaction with Jupiter's Magnetosphere
Tue - 22	EDGAR	BERING	IONOSPHERIC AND STRATOSPHERIC ELECTRIC FIELD RESPONSES TO AN EXTREME SOLAR ENERGETIC PARTICLE EVENT
Tue - 23	Patrick	Essien	Study of Medium-Scale Traveling Ionospheric Disturbances Observed in the South American Equatorial and Low Latitude Region
Tue - 24	Dong	Wei	The magnetospheric driving source of double-peak subauroral ion drifts (DSAIDs): Double ring current pressure peaks
Tue - 25	Zihan	Wang	Segmentation of Storm Enhanced Density (SED) by Boundary Flows Associated with Partial Ring current
Tue - 26	Naomi	Maruyama	On the factors that control plasmaspheric ion composition
Tue - 27	Sebastijan	Mrak	Small-scale density irregularities and electric-field reversal in the plasmopause boundary layer
Tue - 28	Agnit	Mukhopadhyay	Identifying Sources of Auroral Conductance in Global Models

Tue - 29	Denny	Oliveira	Modeling Extreme Satellite Orbital Drag
Tue - 30	Sarah	Vines	AMPERE observations of high-latitude electrodynamic versus EW-FAC model results
Tue - 31	Ying	Zou	Effects of substorms on high-latitude upper thermospheric winds
Tue - 32	Christine	Gabrielse	Storm Time Mesoscale Plasma Flows in the Nightside High Latitude Ionosphere: A Statistical Survey of Characteristics
Tue - 33	Thomas	Coppeans	GNSS TEC and Scintillation Variations Following Solar Wind Dynamic Pressure Enhancement
Tue - 34	F.	Sadler	Effects of Periodic Precipitation on Ion Upflow and Neutral Upwelling
Tue - 35	Dong	Lin	SAPS in the 2013 March 17 Storm Event: Initial Results from the Coupled Magnetosphere-Ionosphere-Thermosphere Model

**Focus Group: 09. Magnetic Reconnection in the Age of the Heliophysics System Observatory**

Tue - 36	WEIJIE	SUN	MMS observations of the magnetic structure of ion-scale flux ropes in the magnetotail
Tue - 37	Deirdre	Wendel	Electron Vortex Flows, Angular Momentum, and Topological Change in Magnetic Reconnection
Tue - 38	Paul	Cassak	Simulations of Nascent Flux Rope Observations at the Earth's Dayside Magnetopause
Tue - 39	Stefan	Eriksson	Nascent Flux Rope Observations at the Earth's Dayside Magnetopause
Tue - 40	Samuel	Greess	Matching Results from Experimental and Simulated Collisionless Reconnection: TREX and Cylindrical VPIC
Tue - 41	Jonathan	Ng	Modeling kinetic effects in fluid simulations of reconnection and current sheet instabilities using moment closures
Tue - 42	Prayash	Sharma Pyakurel	Three dimensional high temperature electron-only reconnection
Tue - 43	Haoming	Liang	Kinetic Entropy Evolution in Magnetic Reconnection

**Focus Group: 10. Interhemispheric Approaches to Understand M-I Coupling (IHMIC)**

Tue - 44	Zhiyang	Xia	Statistical characteristics of ionospheric hiss waves
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**Focus Group: 11. System Understanding of Radiation Belt Particle Dynamics through Multi-spacecraft and Ground-based Observations and Modeling**

Tue - 45	Man	Hua	Simulation of electron butterfly pitch angle distribution in the Earth's inner radiation belt and slot region
Tue - 46	Mykhaylo	Shumko	Microburst Scale Size Distribution Derived with AeroCube-6
Tue - 47	Evan	Tyler	A comparison of the statistical distribution of whistler-mode waves with large electric versus large magnetic fields
Tue - 48	Xu	Liu	The Relation Between Electron Cyclotron Harmonic Waves and Plasmapause In the Earth's Magnetosphere: Case and Statistical Studies
Tue - 49	Solene	Lejosne	Radial Diffusion Misconceptions
Tue - 50	Jinxing	Li	Origin of two-band chorus in the Earth's outer radiation belt
Tue - 51	Shangchun	Teng	Characteristics of rising tone whistler mode waves inside the Earth's plasmasphere, plasmaspheric plumes and plasmatrough
Tue - 52	Shangchun	Teng	Typical Characteristics of Whistler Mode Waves categorized by their spectral properties using Van Allen Probes Observations
Tue - 53	Hong	Zhao	The Acceleration of Ultrarelativistic Electrons in the Outer Radiation Belt
Tue - 54	Junga	Hwang	High-Frequency Thermal Fluctuations and Instabilities in the Radiation Belt Environment
Tue - 55	Longzhi	Gan	Quantifying Non-linear Effects of Realistic Chorus Waves on the High Energy Electrons in the Earth's Radiation Belt
Tue - 56	Rachael	Filwett	Solar Proton Access to the Inner Magnetosphere as Observed by Van Allen Probes
Tue - 57	Zheng	Xiang	On Trapped Electron Dynamics in Earth's Inner Radiation Belt due to Atmospheric Scattering Loss and Cosmic Ray Albedo Neutron Decay (CRAND) as the Source
Tue - 58	Xiao-Chen	Shen	Statistically calculate the transverse scale size of chorus element by utilizing RBSP and THEMIS waveform data
Tue - 59	David	Hartley	Angular Distribution of Chorus Waves and the Role of Plumes in the Chorus Hiss Mechanism
Tue - 60	Haimeng	Li	The reduction of plasmaspheric hiss wave intensity associated with the enhanced magnetospheric electric field during substorm
Tue - 61	Richard	Selesnick	Energetic electrons below the inner radiation belt

Tue - 62	Zhao	Li	Advective process modeling for radiation belt electrons
Tue - 63	Ilya	Kuzichev	Magnetospheric chorus wave simulations with 2D PIC code
Tue - 64	Leng Ying	Khoo	On the initial enhancements of energetic electrons and the innermost plasmopause locations under various geomagnetic conditions
Tue - 65	Kun	Zhang	Long-term variations of the inner belt electrons
Tue - 66	Xin	An	Nonlinear wave structures driven by whistler waves
Tue - 67	Myeong Joon	Kim	Investigation of Ion Heating in Plasmaspheric Plumets using Van Allen Probes and Ion PADs using MMS
Tue - 68	Liheng	Zheng	Drift shell bifurcation effects on radiation belt electrons modeled by Markov chain
Tue - 69	Colin	Komar	Modeling an Extreme Coronal Mass Ejection and its Consequences for the Earth's Inner Magnetosphere
Tue - 70	Nicole	Echterling	Wave-Particle Interactions in Earth's Radiation Belts: A Model Study of Correlated Electron Bursts & Whistler Chorus
Tue - 71	Adam	Kellerman	Breaking all the invariants, or not?
Tue - 72	Robert	Redmon	Metop-C Space Environment Monitor (SEM-2)
Tue - 73	Jaejin	Lee	Magnetosphere/Ionosphere study with formation flying CubeSats, SNIPE Mission
Tue - 74	Scot	Elkington	K2: combining local acceleration and radial transport processes in global MHD simulations of the radiation belts
Tue - 75	Colin	Wilkins	Calibration and First Data from UCLA's Electron Losses and Fields Investigation (ELFIN) Dual CubeSat Mission

**Focus Group:** 12. Particle Heating and Thermalization in Collisionless Shocks in the MMS Era

Tue - 76	Lynn	Wilson III	Electron energy partition across interplanetary shocks near 1 AU
Tue - 77	Steven	Schwartz	Statistics of Reconnecting Current Sheets in the Transition Region of Earth's Bow Shock
Tue - 78	Ivan	Vasko	Electrostatic wave activity in the Earth's bow shock (MMS observations)
Tue - 79	Steve	Schwartz	Collisionless Shocks: The case for quasi-potential fields
Tue - 80	Naoki	Bessho	Kinetic physics of magnetic reconnection in the transition region of a quasi-parallel shock
Tue - 81	Shan	Wang	Reconnecting current sheets in the bow shock turbulence
Tue - 82	Katherine	Goodrich	Impulsively Reflected Ions: A Plausible Mechanism for Ion Acoustic Wave Growth in Collisionless Shocks
Tue - 83	Takanobu	Amano	Theory and Simulation for Stochastic Shock Drift Acceleration of Electrons

**Focus Group:** Not assigned

Tue - 84	David	Kenward	Observations of Ion Upflow during Pulsating Aurora
Tue - 85	Jiaen	Ren	Multi-scale Observations of High-Latitude Ionosphere Plasma Transport During Oct. 12, 2016 Geomagnetic Storm
Tue - 86	Robert	Strangeway	Comparing Data and Global Simulations to Investigate the Sources of Auroral Field Aligned Currents
Tue - 87	Ashley	Greeley	Pitch angle evolution of relativistic electrons during storms
Tue - 88	Brady	Griffith	Analysis of Microburst Pitch Angle Dependence using SAMPEX in Spin Mode
Tue - 89	Elizabeth (Lily)	Hanson	Cross-Shock Potential in Rippled vs. Planar Quasi-Perpendicular Shocks Observed by MMS
Tue - 90	Yu	Huang	Prediction of Soft Proton Fluxes Observed by Cluster/RAPID using Decision Trees
Tue - 91	Arlo	Johnson	Investigation of Hard Electron Precipitation Observed on FIREBIRD During a Conjunction With Cluster-2
Tue - 92	Margaret	Tilton	Accessing NOAA's Space Weather Satellite Data: POES, GOES and DSCOVR Products

## Thursday

Poster Number	First Name	Last Name	Poster Title
<b>Focus Group: 01. Testing Proposed Links between Mesoscale Auroral and Polar Cap Dynamics and Substorms</b>			
Thu - 01	Riley	Troyer	An Overview of the 2020 Loss Through Auroral Microburst Pulsations (LAMP) Sounding Rocket Mission
Thu - 02	Lindsay	Goodwin	The role of substorms in polar cap patch formation
<b>Focus Group: 03. Merged Modeling &amp; Measurement of Injection Ionospheric Plasma into the Magnetosphere (M3I2) and Its Effects -- Plasma Sheet, Ring Current, Substorm Dynamics</b>			
Thu - 03	George	Khazanov	The Magnetosphere-Ionosphere Electron Precipitation Dynamics and Their Geospace Consequences
Thu - 04	Naritoshi	Kitamura	Solar zenith angle dependence of relationships between energy inputs to the ionosphere and ion outflow fluxes
Thu - 05	Li-Jen	Chen	Can energetic O <sup>+</sup> outflows preceding superstorms participate in the ring current directly?
Thu - 06	Gonzalo	Cucho-Padin	Storm-time ring current decay driven by time-varying exospheric H distributions
Thu - 07	Konstantin	Gamayunov	Heating and Geomagnetic Trapping of O <sup>+</sup> in the Inner Magnetosphere due to Interaction With the He-band EMIC Waves
Thu - 08	Marissa	Hedlund	Direct entry of O <sup>+</sup> into the near-earth (8-12 Re) plasma sheet
Thu - 09	Michael	Liemohn	Earth's Many Geopauses
<b>Focus Group: 04. ULF wave Modeling, Effects, and Applications</b>			
Thu - 10	Yangguang	Ke	Two-dimensional PIC simulations of chorus waves in a dipole magnetic field
Thu - 11	Muhammad Fraz	Bashir	N <sup>+</sup> Band of Electromagnetic Ion Cyclotron Waves in Anisotropic Plasmas
Thu - 12	Tomotsugu	Yamakawa	Excitation of storm-time Pc5 ULF waves by ring current ions based on the drift-kinetic simulation
Thu - 13	Mergen	Alimaganbetov	Ultra-Low Frequency Waves in Solar Wind, and Ground Stations at High, Mid, Low Latitudes
Thu - 14	Tom	Elsden	Modeling the Dawn/Dusk Asymmetry of Field Line Resonances
Thu - 15	Joseph	Fennell	Do ULF waves generate microinjections?
<b>Focus Group: 05. Modeling Methods and Validation</b>			
Thu - 16	Poorya	Hosseini	Self-consistent backward Liouville solver for nonlinear whistler wave-particle interaction in the Earth radiation belts
Thu - 17	David	Malaspina	The impact of hiss wave properties on diffusive models of radiation belt dynamics
Thu - 18	XUANYE	MA	Statistical Correlation Study Between Solar Wind, Magnetosheath, and Magnetotail Plasma and Field Properties: 9 Years of THEMIS Observations and MHD Simul
Thu - 19	Zhifang	Guo	Magnetopause reconnection as influenced by the dipole tilt under southward IMF conditions: MMS observations and hybrid simulation
Thu - 20	Lutz	Rastaetter	Comprehensive Assessment of Models and Events using Library Tools (CAMEL)
Thu - 21	Jackson	McCormick	Investigating Lightning-Induced Electron Precipitation With Lightning Generated Spherics
Thu - 22	Darren	De Zeeuw	Kamodo: A python based visualization tool from the CCMC
Thu - 23	Brandon	Ponder	Modeling the Earth's Thermal Conduction Coefficients
<b>Focus Group: 06. Dayside Kinetic Processes in Global Solar Wind-Magnetosphere Interaction</b>			
Thu - 24	Mojtaba	Akhavan-Tafti	MMS Investigation of the Role of FTEs in Plasma Acceleration & Heating
Thu - 25	Terry	Liu	Particle acceleration by magnetosheath jet-driven bow waves
Thu - 26	Yi	Qi	Magnetic curvature identification of the reconnection line on the earth's magnetopause
Thu - 27	Yann	Pfau-Kempf	Dayside magnetopause reconnection in a quasi-3D global hybrid-Vlasov simulation

Thu - 28	Taylor	Cameron	Predicting Solar Wind Phase Plane Geoeffectiveness Using Mutual Information
Thu - 29	Ehab	Hassan	Forecasting the Geomagnetic Disturbances using a Solar Wind Ensemble
Thu - 30	Hui	Zhang	Foreshock Transients and Their Geoeffects
Thu - 31	Andrew	Vu	Substructures of Hot Flow Anomalies
Thu - 32	Rhyan	Sawyer	TRICE 2 Rocket Investigation of Low Energy Ions in the Earth's Magnetospheric Cusp
Thu - 33	Kevin	Delano	The He <sup>++</sup> /H <sup>+</sup> Density Ratio Across Earth's Subsolar Magnetopause
Thu - 34	Naritoshi	Kitamura	Small scale whistler mode waves near the magnetic field intensity minimum in the magnetosheath
Thu - 35	Arya	Afshari	An Observation of Ion Kinetic Processes in the Magnetosheath using MMS Data
Thu - 36	Jean	Berchem	Multiscale simulations of the dayside magnetopause
Thu - 37	Daniel	Graham	Plasma frequency waves in Earth's electron foreshock
Thu - 38	Pauline	Dredger	THEMIS observations of a period of multiple magnetopause crossings
Thu - 39	Rachel	Rice	Growth Rates of the Kelvin-Helmholtz Instability as Observed by MMS with Simulation Comparisons

**Focus Group: 07. Magnetotail Dipolarization and Its Effects on the Inner Magnetosphere**

Thu - 40	Matthew	Cooper	Dipolarizing Flux Bundles and ULF Pulsations in High Beta Plasma: A Link?
Thu - 41	Abigail	Azari	Supervised Classification for Inner Magnetosphere Injections at Saturn: Implications for Transport in Planetary Magnetosphere
Thu - 42	Ryan	Dewey	MESSENGER observations of flow braking in Mercury's magnetosphere
Thu - 43	Dong	Lin	A New Perspective for Dipolarization Front Dynamics: Electromagnetic Effects of Velocity Inhomogeneity
Thu - 44	Yi-Hsin	Liu	An explanation of the opposite dawn-dusk asymmetry at magnetotails of Earth vs. Mercury
Thu - 45	Brian	Swiger	Neural Network for Plasma Sheet Particles from Upstream Solar Wind
Thu - 46	Christine	Gabrielse	Utilizing the Heliophysics/Geospace System Observatory to Understand Particle Injections: Their Scale Sizes and Propagation Directions

**Focus Group: 09. Magnetic Reconnection in the Age of the Heliophysics System Observatory**

Thu - 47	Jan	Graf Von Der Pahlen	The Effect of Guide-Field and Boundary Conditions on the Features and Signatures of Collisionless Magnetic Reconnection in a Stressed X-Point Collapse
Thu - 48	Emil	Atz	The Instruments to Image Magnetic Reconnection
Thu - 49	Binbin	Tang	Crescent-shaped electron distributions at the non-reconnecting magnetopause: MMS observations
Thu - 50	Hyunju	Connor	SMILE: Now officially accepted by ESA-CHINA with a launch in 2023
Thu - 51	Jaewoong	Jung	Extracting near-Earth solar wind charge exchange emission from the XMM-Newton astrophysics data for the exospheric density study
Thu - 52	Subash	Adhikari	Is laminar reconnection a turbulent process?
Thu - 53	Kai	Huang	Scaling of 3D magnetic reconnection with a spatially confined x-line extent

**Focus Group: 11. System Understanding of Radiation Belt Particle Dynamics through Multi-spacecraft and Ground-based Observations and Modeling**

Thu - 54	Rachael	Filwett	The Whole Heliosphere and Planetary Interactions (WHPI) campaign
Thu - 55	Nithin	Sivadas	Outer Radiation Belt Loss from the Transition Region
Thu - 56	Ivan	Vasko	Electrostatic steepening of oblique whistler waves in the radiation belts
Thu - 57	Kristine	Sigsbee	Simultaneous Electromagnetic Ion Cyclotron (EMIC) Wave Observations During a Van Allen Probes Conjunction
Thu - 58	Yihua	Zheng	Scoreboard of the near-Earth charging environment
Thu - 59	Wenyao	Gu	VLF Alpha Transmitters Signal in the Magnetosphere

**Focus Group: 12. Particle Heating and Thermalization in Collisionless Shocks in the MMS Era**

Thu - 60	Terry	Liu	MMS observations of magnetic reconnection inside a hot flow anomaly
Thu - 61	Ilya	Kuzichev	PIC simulation of the whistler heat flux instability in the interplanetary shocks
Thu - 62	Xin	An	Formation of foreshock transients and associated secondary shocks
<b>Focus Group:</b>	<b>Not assigned</b>		
Thu - 63	Akhtar	Ardakani	The role of O <sup>+</sup> on Local and Global Changes During Reconnection in the Magnetotail
Thu - 64	Shichen	Bai	Electron dynamics close to the separatrix: MMS observation
Thu - 65	Riddhi	Bandyopadhyay	MMS study of the Turbulence in the Magnetosphere
Thu - 66	Mohammad	Barani	High-resolution Azimuthal ULF mode number analysis using MMS
Thu - 67	Rohit	Chhiber	Higher-Order Turbulence Statistics in the Earth's Magnetosheath and the Solar Wind Using Magnetospheric Multiscale Observations
Thu - 68	Kellyn	Clink	MMS Observations of Current Sheet Flapping at Earth's Plasma Sheet
Thu - 69	Maria	Gavrilovic	POLAR Observation of VLF Transmitter Signals
Thu - 70	Niharika	Godbole	RENU2 Observations of Thermal Ion Upflow and Downflow
Thu - 71	Andrew	Marshall	Dissipation of Parallel Crescents upon a Separatrix
Thu - 72	Gang Kai	Poh	Dissipation of Earthward Propagating Flux Rope Through Re-reconnection with Geomagnetic Field: A MMS Case Study
Thu - 73	Kristina	Pritchard	On Defining Dayside Asymmetric EDRs
Thu - 74	Anthony	Rogers	Comparison and Application of Scalar Proxy Parameters to the Identification of Ion Diffusion Regions
Thu - 75	Michelle	Salzano	Determining if ground-based observations can be used as a proxy for ion outflow
Thu - 76	michael	starkey	MMS Observations of Accelerated Pickup He <sup>+</sup> at an Interplanetary Shock
Thu - 77	Boyi	Wang	The role of magnetosheath high-speed jets in driving magnetospheric ULF waves
Thu - 78	James	Webster	Instabilities in Reconnection Outflow Jets
Thu - 79	Blake	Wetherton	Equations of State for Guide Field Reconnection applied to MMS observations
Thu - 80	Guy	Whittall-Scherfee	Drift Resonance Between Ions and Poloidal Mode ULF Waves
Thu - 81	Alexandra	Wold	Investigating Radiation Belt Enhancements and Depletions with GPS Energetic Electron Data
Thu - 82	Steven	Xu	Statistics of current sheets at lunar distance
Thu - 83	Augustine	Yellu	Observations of Stimulated Electromagnetic Emission Second Harmonic Generation during Ionospheric Heating
Thu - 84	Xu	Zhang	Energy transport by whistler waves around dipolarizing flux bundles
Thu - 85	Wonde	Eshetu	Field line curvature scattering of ring current ions
Thu - 86	Humberto	Godinez	Variational Data Assimilation for 1-D Radiation Belt Model
Thu - 87	Nikita	Aseev	Reanalysis of ring current phase space densities using Van Allen Probe observations, convection model and Kalman filter