

Dear THEMISers, ARTEMISers, and friends,

Below please find the agenda for the Post-AGU THEMIS/ARTEMIS SWT. Please prepare short presentations: max 3 slides (5 minutes, you will be timed), with a couple minutes for questions.

If your talk is missing please let Emmanuel (emasongsong@igpp.ucla.edu) and Tai (phan@ssl.berkeley.edu) know.

Location:

Hilton Garden Inn McCormick Place
Commodore-Hudson Room
123 E Cermak Rd Suite 300,
Chicago, IL 60616

Zoom link: <https://ucla.zoom.us/j/96877617402?pwd=WGducUJ3VDk5VE9KbDIFT05RMC9Ydz09>

Meeting ID: 968 7761 7402

Passcode: 771102

THEMIS/ARTEMIS SWT: Saturday, Dec 17, 2022 8:30am-5pm

Part 1: Mission planning and operations outlook. Products, processing, upcoming opportunities, strategy.

8:30-8:45: Intro (Vassilis)

8:45-9:00: NASA HQ view (J. Leisner)

9:00-9:15: NASA HQ: ARTEMIS (J. Spann)

9:15-9:30: Themis/Artemis mission status and future plans (Vassilis)

9:30-9:35: SPEDAS and pySPEDAS (Jim Lewis)

9:35-9:45: Orbits (S. Frey)

9:45-9:50: GBO (E. Donovan)

9:50-9:55: FGM (F. Plaschke, J. Mieth)

9:55-10:15: SCM, EFI, ESA, SST (Vassilis)

Break (10:15-10:30)

Dayside and Lunar Science: (5-min presentations)

Suleiman Baraka (U. Calgary), Charge separation at the lunar surface as simulated by PIC code

Li-Jen Chen (NASA/GSFC), 3D structures and dynamics of storm-time magnetopause boundary layers: what we learn from THEMIS, MMS, Cluster, and global simulations

Lucas Liuzzo (Berkeley), Characterizing the lunar plasma environment in Earth's magnetotail

Andrew Poppe (Berkeley), A comprehensive model for pickup ion formation at the Moon with comparisons to ARTEMIS

Mohammad Barani (Berkeley), Study of Ionospheric Heavy Ions in Terrestrial Magnetotail Using ARTEMIS

Joachim Raeder (UNH), KH waves seasonal and diurnal effects

Rhyan Sawyer (U. Iowa), Hall Physics in the Near Lunar Surface Environment

David Sibeck (NASA/GSFC), Response of the Bow Shock and Magnetopause to Radial IMF turnings

Paul Szabo (Berkeley), Kaguya observations of ion precipitation into the lunar polar regions

Shaosui Xu (Berkeley), Characteristics of Lunar surface electrons inferred from ARTEMIS observations: disentangling backscattered electrons and photoelectrons

Kun Zhang (Space Sciences Inst.), The Early-phase Growth of ULF Waves in the Ion Foreshock observed in a Hybrid-Vlasov Simulation

Gabor Facsko (Budapest), Testing shock jump predictions: THEMIS Observations, [via Zoom](#)

Adrian LaMoury, Magnetosheath jets impacting the magnetopause: beta-shear conditions for reconnection

Florian Koller (Graz), Connecting Magnetosheath Jets to large-scale Solar Wind Structures, [via Zoom](#)

Laura Vuorinen (Univ. of Turku, Finland), Solar wind parameters influencing magnetosheath jet formation: low and high IMF cone angle regimes" and "Magnetosheath jets over solar cycle 24: an empirical model, [via Zoom](#)

Seth Dorfman (Space Science Institute), Probing the foreshock wave boundary using ARTEMIS and Vlasiator

Lunch (12:15-13:30)

Auroral, Inner Magnetosphere, and Tail Science: (5-min presentations)

Fekireselassie Beyene (UCLA), Storm-time Very-Near-Earth Magnetotail Reconnection: A Statistical Perspective

Chih-Ping Wang (UCLA), Energy-dispersive field-aligned warm ion enhancement in the plasma sheet during a substorm growth phase: A THEMIS event, [Via Zoom](#)

Liwei Chen (Nagoya Univ.), Correspondence of Pi2 pulsations, ion pressure fluctuations, and aurora luminosity measured by a conjugate observation of a substorm event

Xiaofei Shi (UCLA), On the role of ULF waves in the spatial and temporal periodicity of energetic electron precipitation

Adetayo Eyelade (Universidad de Santiago de Chile), Solar Wind Control of Ion and Electron Kappa Distribution Parameters in the Earth Inner Magnetosphere: THEMIS observation

Timo Pitkanen (Shandong and Umea University), IMF By influence on ion convection in the mid-tail [Via Zoom](#)

Luphi Gao (Drexel Univ.), Parameterization of energetic ion and electron fluxes in the near-Earth magnetotail

Heidi (Fuqua) Haviland (NASA/MSFC), Nightside Time Domain Electromagnetic Sounding with ARTEMIS: Challenges of Isolating Induction from the Lunar Interior

Dominic Hernandez (UCLA), A Parametric Survey of Beam-driven Electron Cyclotron Harmonic and Electron Acoustic Waves in relation to Earth's Diffuse Aurora

Sergei Kamaletdinov (UCLA), Magnetotail Thin current sheets in the ~ 60RE: statistics of ARTEMIS observations

Break (3:00-3:10)

Toshi Nishimura (Boston Univ.), Structure and Evolution of Meso-scale Flows in the Nightside Auroral Ionosphere during Storms and Substorms, [via Zoom](#)

Alexandra Pouliasi (UCLA), Generation of Electromagnetic Ion Cyclotron Waves Modulated by Ultra-Low-Frequency Waves

Chen Shi (UCLA), Instability of current sheet with plasma flows

Xin An (UCLA), Kinetic equilibrium of two-dimensional force-free current sheets

Kazuo Shiokawa (Nagoya), Simultaneous observations of isolated proton auroras and associated EMIC waves at subauroral latitudes using ground all-sky imagers and the Van Allen Probes

Xiao Chao (Shandong Univ), Evidence for lunar tide effects in Earth's inner magnetosphere, [Via Zoom](#)

Muhammad Fraz Bashir (UCLA), First ELFIN Observations of Relativistic Electron Precipitation Driven by the Combined Effect of Whistler and EMIC Waves

Alexa Roosnovo (LANL/UCLA), Electron Precipitations as Driven by Interplanetary Shock Impact on the Earth's Magnetosphere

Yangyang Shen (UCLA), Energetic electron scattering by kinetic Alfvén waves from the substorm plasma sheet, [via Zoom](#)

Ligia Alves da Silva (National Institute for Space Research), Electron flux variability in the outer radiation belt during different solar wind structures, [via Zoom](#)