

THEMIS/ARTEMIS SWT Meeting Winter 2022

Wednesday-Thursday, February 23-24th 2022 via Zoom

ZOOM LINK:

<https://ucla.zoom.us/j/98503360003?pwd=aDhZNkY3V2pEekZMcDI2WFJ2ZG9oZz09>

Meeting ID: 985 0336 0003

Passcode: 978746

Wednesday February 23

(8:00-9:40am, all times are Pacific UTC -8)

Sawaguchi, Wataru (Kyoto University), Spectral properties of whistler-mode waves in the vicinity of the Moon

Wang, Huizi (Shandong Univ.), ENA and lunar water observations as studied by ARTEMIS, Chang'e and other space missions

Wang, Kaiti (Tamkang University), Peak ion fluxes spectrum observed by ARTEMIS Mission during large Solar Proton Events

Halekas, Jasper (U. Iowa), Lunar Vertex mission and ARTEMIS

Xu, Shaosui (UCB, SSL), Lunar Photoemission Yields Inferred From ARTEMIS Measurements

Poppe, Andrew (UCB SSL), ARTEMIS Observations of Lunar Nightside Surface Potentials in the Terrestrial Magnetotail Lobes

Liuzzo, Lucas (UCB SSL), A Statistical Study of the Moon's Magnetotail Plasma Environment

Gao, Luphi (Nyheim Plasma Institute, Drexel University), Plasma sheet whistler-mode waves: THEMIS-based statistical model

LaMoury, Adrian (Imperial College), Solar wind control of magnetosheath jet formation and propagation to the magnetopause

Vuorinen, Laura (Univ. of Turku), Magnetic field in magnetosheath jets: A statistical study of Bz near the magnetopause

Vuorinen, Laura (Univ. of Turku), Monte Carlo simulations of electron acceleration at magnetosheath jet-driven bow waves

Sawyer, Rhyann (U. Iowa), Electron Heating Near the Lunar Surface

Shahid, Muhammad (GC University Lahore Pakistan), Properties of quasi-periodical emission of electromagnetic ion cyclotron waves

15-min break

(9:55-11:40)

Sibeck, David, Continuously Tracking the Bow Shock and Magnetopause: Theory

Silveira, Marcos (CUA), Continuously Tracking the Bow Shock and Magnetopause: Observations

Archer, Martin (Imperial College), Magnetopause ripples going against the flow form azimuthally stationary surface waves

Zhang, Kun (Space Sciences Institute), The early-phase growth of ULF waves in the ion foreshock observed in a hybrid-Vlasov simulation

Sarris, Theodore (DUTH), Distribution of ULF wave power in Magnetic Latitude based on THEMIS and Arase measurements

Dorfman, Seth (Space Sciences Institute), Detecting the edges of Earth's ion foreshock using Magnetic Gauss's Law

Waheed, Abdul (USTC), Whistler and electron cyclotron harmonic waves at the near-Earth dayside plasma sheet: statistics of modulation by ultra-low frequency waves

Edmond, James (UNH), Using Unsupervised Machine Learning to Resolve Bow Shock Crossings
di Matteo, Simone (Catholic University of America / NASA-GSFC), On the source of the anomalous ULF waves detected at ground and space on [June 23, 2020](#)
Weygand, James (UCLA EPSS), Fifteen Years of Spherical Elementary Currents and THEMIS
Gabrielse, Christine (Aerospace), Precipitating Energy Flux, Average Energy, and Hall Auroral Conductance from THEMIS All-Sky-Imagers during Two Substorms: Mesoscale Contributions
Artemyev, Anton (UCLA EPSS), Magnetotail current sheet thinning: THEMIS and ELFIN observations
Frey, Harald (UCB SSL) Status of THEMIS-GBOs and related SPEDAS software
Vassilis Angelopoulos, THEMIS/ARTEMIS update

Thursday February 24

(8:00-9:30)

Chao, Xiao (Shandong Univ.), Lunar tidal signatures at the plasmopause
Nishimura, Toshi (BU) Space-Ground Observations of Dynamics of Substorm Onset Beads
Tian, Sheng (UCLA AOS), Auroral beads in conjunction with kinetic Alfvén waves in the equatorial inner-magnetosphere
Archer, Martin (Imperial College), Listening to the magnetosphere: How best to make ULF waves audible
Atz, Emil (Boston University), Statistical Study of the Spatial Extent of Magnetopause Reconnection as Observed by THEMIS
Wang, Chi-Ping (UCLA AOS), Machine-learning plasma sheet empirical model with THEMIS and ARTEMIS data
Donovan, Eric (U. Calgary) THEMIS-ASI/TREx update
Donovan, Eric (U. Calgary), Machine Learning Classification of the THEMIS-ASI Image Set
Urbar, Jaroslav (INGV), THEMIS-Swarm conjunctions analysed by the Fast Iterative Filtering: Multiscale insight into MIT coupling
Lyons, Larry (UCLA AOS), Verification of Substorm Onset from Intruding Flow Channels with High-Resolution SuperDARN Radar Flow Maps
Gan, Longzhi (BU), Bursty electron precipitations by very-oblique whistler-mode waves
Zhang, Wei (BU), Identifying the Structure and Propagation of Pc5 ULF Waves Using Space-ground Conjunctions

15-min Break

(9:45-11:45)

Frey, Sabine (UCB, SSL), THEMIS/ARTEMIS Mission Design Status
Pease, Deron (UCB, SSL), THEMIS/ARTEMIS Mission Operation Status
Liu, Terry Z. (UCLA EPSS), Magnetospheric field-aligned current driven by foreshock transients
Zhang, Xiaojia (UCLA EPSS), Energetic Electron Precipitation Driven by Nonlinear Landau Resonance with Oblique Whistler Waves
Hartinger, Mike (SSI/UCLA) Listening to THEMIS Measurements: Citizen Scientist Analysis of ULF Wave Events
Ojha, Biswajit (Indian Institute of Geomagnetism), Observation of Low-frequency Magnetosonic waves associated with EMIC rising tones by THEMIS spacecraft
Yadav, Sneha (UCLA AOS), Association of equatorward extending streamers with ground magnetic perturbations and geosynchronous injections
Frantsunov, Viktor (Space Research Institute, Moscow), Whistler-mode generation threshold in multicomponent plasma: THEMIS statistics and theoretical mode

Shustov, Pavel (Space Research Institute, Moscow), THEMIS observations of radial evolution of thermal electron distributions in the magnetotail

Shen, Yangyang (UCLA EPSS), Plasma sheet energetic injection electron precipitation: a THEMIS-ELFIN-DMSP conjunction event

Tsai, Ethan (UCLA EPSS), Utilizing ELFIN-THEMIS conjunctions to study non-linear resonance between relativistic electrons and whistler-mode waves

Bashir, Muhammad Fraz (UCLA EPSS), Hot plasma effects on electron resonant scattering by electromagnetic ion cyclotron waves

Eyelade, Adetayo Victor (Universidad de Santiago de Chile) Properties of Ion and Electron Kappa distribution in the Earth's Magnetosphere: THEMIS observations