

Center for Geospace Storms (CGS)Center for Geospace Storms (CGS)

Day	Session	Time	Title	Presenter	File	Details
Monday, November 15, 2021		10:45 AM	Introduction and Welcome	Slava Merkin (APL)		
Monday, November 15, 2021	Session 1 - Multiscale plasma sheet transport and ring current build-up Session Chair Anthony Sciola (APL)	11:00 AM	The role of mesoscale dynamics in the magnetotail: Particle transport, energization, and ring current formation	Adam Michael (APL)		
Monday, November 15, 2021	Session 1 - Multiscale plasma sheet transport and ring current build-up Session Chair Anthony Sciola (APL)	11:25 AM	RCM-I modeling of bubble injections into the inner magnetosphere: Geostationary altitudes and ionospheric responses	Sina Sadeghzadeh (SCTU)		
Monday, November 15, 2021	Session 1 - Multiscale plasma sheet transport and ring current build-up Session Chair Anthony Sciola (APL)	11:50 AM	Mesoscales and their Contribution to the Global Response: A Focus on the Magnetotail Transition Region and Magnetosphere-Ionosphere Coupling	Christine Gabrielse (Aerospace Corp.)		
Monday, November 15, 2021	Session 1 - Multiscale plasma sheet transport and ring current build-up Session Chair Anthony Sciola (APL)	12:15 PM	Session Discussion			
Monday, November 15, 2021	Monday Lunch Break	12:45 PM	Lunch on your own			
Monday, November 15, 2021	Session 2 - Stormtime ionosphere-thermosphere structures and the geospace plume Session Chair Dong Lin (HAO)	1:45 PM	Thermospheric Density Perturbations Produced during August 2005 Storm	Kevin Pham (HAO)		
Monday, November 15, 2021	Session 2 - Stormtime ionosphere-thermosphere structures and the geospace plume Session Chair Dong Lin	2:10 PM	Effect of geospace plume on local and global magnetopause reconnection	Ying Zou (UAH)		

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	(HAO)					
Monday, November 15, 2021	Session 2 - Stormtime ionosphere-thermosphere structures and the geospace plume Session Chair Dong Lin (HAO)	2:35 PM	Modeling the Geospace Plume in a Magnetosphere-ionosphere-thermosphere Coupled System	Shanshan Bao (Rice)		
Monday, November 15, 2021	Session 2 - Stormtime ionosphere-thermosphere structures and the geospace plume Session Chair Dong Lin (HAO)	3:00 PM	Session Discussion			
Monday, November 15, 2021	Break	3:30 PM	Chance to catch up on your email :-)			
Monday, November 15, 2021	Session 3 - Undergraduate Research in Space Sciences Session Chair Alexandra Matiella Novak (APL)	3:45 PM	Student showcase	Click on the "+" sign on the left for full list of students		Student presenters are: Tamar Ervin (UCLA, Machine Learning Methods for Coronal Hole Detection) John Fiorini (VA Tech, SuperDARN Transmitter Diagnostic Hardware System) Ethan (Duke) Hill (VA Tech, My Time at SuperDARN VT) Isabella Householder (UNH, My Experience in Undergraduate Research at UNH: Studying Electron Precipitation) Ian Kelley (VA Tech, My Research Journey as a Student: TIDs in SuperDARN and TEC) Preston Tracy (Rice, Effects of Different Driving Factors on Ionospheric Saturation and the Resulting Impact on Auroral Radio emission) Valerie Svaldi (CU, High Latitude Ionospheric Electrodynamics during STEVE and Non-STEVE Substorm Events) Kawther H. Rouabhi (U. Iowa, Identification of Pulsating Aurora Events Using Machine-Learned Models) Aliyah Farnum (Howard U., Heliophysics in the K-12 classroom)
Monday, November 15, 2021	Session 3 - Undergraduate Research in Space Sciences Session Chair Alexandra Matiella Novak (APL)	4:45 PM	Panel on careers in space science and engineering	Allison Jaynes (U. of Iowa) Robyn Millan (Dartmouth) Anthony Sciola (JHU/APL) Roger Varney (SRI) Deena Khalil (Howard U.)		
Monday, November 15, 2021	Monday Adjourn	5:30 PM	End of Day			
Tuesday, November 16, 2021	Session 4 - Lower Atmosphere-Ionosphere-Magnetosphere Coupling Session Chair Roger Varney (SRI)	11:00 AM	Global Modeling of Equatorial Irregularities with SAMI3/WACCM-X	Joe Huba (Syntek)		
Tuesday,	Session 4 - Lower	11:25	How stratospheric	Larisa Goncharenko		

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November 16, 2021	Atmosphere-Ionosphere-Magnetosphere Coupling Session Chair Roger Varney (SRI)	AM	disturbances impact ionosphere/thermosphere at middle and high latitudes	(MIT/Haystack)		
Tuesday, November 16, 2021	Session 4 - Lower Atmosphere-Ionosphere-Magnetosphere Coupling Session Chair Roger Varney (SRI)	11:50 AM	Storm-time effects on interhemispheric asymmetries in the Birkeland currents	Sarah Vines (APL)		
Tuesday, November 16, 2021	Session 4 - Lower Atmosphere-Ionosphere-Magnetosphere Coupling Session Chair Roger Varney (SRI)	12:15 PM	Session Discussion			
Tuesday, November 16, 2021	Tuesday Lunch Break	12:45 PM	Check up on your email :-)			
Tuesday, November 16, 2021	Session 5 - Future Directions of Geospace Research Session Chair Michael Wiltberger (HAO)	1:45 PM	Panelist Presentations (click on the "+" to the left to see session details)	Larry Kepko (GSFC), William Lotko (Dartmouth), Wenbin Wang (HAO) Katie Garcia-Sage (GFSC), Terry Onsager (SWPC)		Questions to be discussed: - What new observational capabilities do we need to advance the understanding and constrain the models of multiscale plasma sheet dynamics and their ionospheric effects? - How does the multiscale nature of mass circulation in the geospace system affect our understanding of its global impacts? - What are the key multiscale connections in atmosphere-ionosphere-magnetosphere coupling? - How do we enable community access to geospace models of increasing complexity, including the growing computational costs and diverse physics? - What are the challenges we should be addressing or anticipating in transitioning geospace models of increasing complexity to operations? What lessons do we need to learn from meteorology?
Tuesday, November 16, 2021	Session 5 - Future Directions of Geospace Research Session Chair Michael Wiltberger (HAO)	2:45 PM	Panel Discussion			
Tuesday, November 16, 2021	Tuesday Adjourn	3:45 PM	End of Meeting			