Dear Colleagues,

We would like to draw your attention to the Fall AGU 2021 session “The Importance of Mesoscale Magnetotail Processes in Global and Kinetic-scale Magnetospheric Dynamics,” more info is below. The session focuses on the role mesoscale processes in the plasma sheet and ionosphere play in mediating interactions across geospace. For those interested, we hope you consider contributing and submit an abstract to our session. Abstracts are due on Wednesday, August 4, 2021.

<https://agu.confex.com/agu/fm21/prelim.cgi/Session/121758>

**Session ID:** 121758
**Session Title:** SM031. The Importance of Mesoscale Magnetotail Processes in Global and Kinetic-scale Magnetospheric Dynamics
**Section:** SPA-Magnetospheric Physics

**Session Description:**Various mesoscale processes play a vital role in mediating the complex interactions across different regions in geospace. It is important to delineate their role from, and contribution to, large-scale and kinetic-scale processes, as well as to ascertain their impacts throughout the system. For example, the explosive process of dipolarization, which occurs on meso- and large-scales while also dissipating energy and accelerating particles via kinetic processes, is a significant component of particle transport and acceleration from the magnetotail plasma sheet to the inner magnetosphere, current generation in the magnetosphere-ionosphere system, and wave generation that further accelerates and/or scatter particles. It is imperative to couple the outer- and inner-magnetosphere with each other and the ionosphere by understanding these processes. This session solicits contributions using in situ and/or ground-based observations as well as global and regional models and theory that incorporate mesoscale processes to examine their impacts

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