# 2025 Workshop: Dayside Processes and Reconnection

Long title
Exploring Dayside Dynamics: Transient Processes Driving Magnetic Reconnection Across the Magnetosphere
GEM-only session
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Description

Transient phenomena can initiate, drive, and modify reconnection processes. Recent studies have robustly demonstrated reconnection in current sheets upstream of Earth's bow shock, within the shock transition region, and in the magnetosheath. Additionally, localized processes, such as high-speed jets, have been shown to influence the magnetopause reconnection process, a fundamental coupling mode between the solar wind and the magnetosphere. In this joint session, the Dayside and Reconnection Focus Groups will jointly explore this exciting research area. Experts from both communities will interact and collaborate, advancing our collective understanding of how transient phenomena affect reconnection. We welcome presentations on all dayside multiscale transient processes, dayside magnetopause reconnection, reconnection within the shock transition layer,

foreshock, and downstream magnetosheath along with the interplay between these phenomena.

Agenda

**Zoom link:**
https://jhuapl.zoomgov.com/j/1612929646?pwd=w4D4RqbLyAoE0EBj5TE4S4tC5Tw1Jo.1

Please see Agenda on:
https://docs.google.com/spreadsheets/d/1rojmNUKMP581TDS9JKz2R9-E9Zto8tLkqPVGw9x286w/edit?usp=sharing

Justification

This joint session aims to provide a focal point for discussion and foster collaborations between the Dayside and Reconnection research communities. While past studies have typically involved experts from one focus area, resulting in incremental progress, this joint session is designed to drive more significant advances in our broader understanding of these intertwined processes.

Related to CEDAR Science Thrusts:
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Explore exchange processes at boundaries and transitions in geospace
Explore processes related to geospace evolution
Fuse the knowledge base across disciplines in the geosciences
Workshop format
Short Presentations
Round Table Discussion
Other
Keywords
dayside, reconnection, transients, magnetosphere
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