

2019—2020 SPACE PHYSICS SEMINAR SERIES

Reconnection outside the box: Earth's magnetopause away from the X-line

Magnetic reconnection is a fundamental plasma process that converts magnetic energy into particle heating and acceleration. At Earth's magnetopause, where it happens along so-called X-lines of extents up to tens of Earth radii, it is the dominant process for solar wind mass and energy entry into the magnetosphere. Magnetopause reconnection has been extensively studied with numerous missions and countless simulations, providing a deep understanding of the microphysics of reconnection, but there are still open questions about the global picture. I will discuss some of these problems and how they can be addressed with existing missions like Magnetospheric Multiscale and upcoming missions like CuPID, a BU-led cubesat that will image reconnection from the magnetospheric cusps.

**Thursday, October 10th**

4:00-5:00 p.m.

725 Commonwealth Ave | Room 502

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