BOSTON UNIVERSITY

Boston University College of Arts & Sciences Center for Space Physics

2022—2023 SPACE PHYSICS SEMINAR SERIES

Solar-Terrestrial Observatory for the Response of the Magnetosphere (STORM): Mission Design

Understanding the flow of mass, energy, and momentum through the Earth's magnetosphere is a central objective for the Heliophysics discipline. The processes that occur at the magnetopause, in the magnetotail, and deep within the magnetosphere are intricately related to one another. Each leaves tell-tale signatures in plasma structures such as the location of the magnetopause, auroral oval and its microstructure, plasma sheet, and ring current. Global imagers offer a cost-efficient means to quantify the significance of mesoscale phenomena in terms of occurrence patterns and amplitudes, whilst incorporating them within their global, system-science, context. This talk describes how science objectives define STORM mission characteristics, including payload, orbit, and pointing. It also describes the MIDEX proposal process.

Thursday, November 3rd

4:00-5:00 p.m.

CAS 502

David Sibeck

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