



SPACE PHYSICS SEMINAR

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Solar Wind – Magnetosphere – Ionosphere Interactions

Thursday, February 28, 2013

725 Commonwealth Ave.

Refreshments at 3:30pm in CAS 500

Talk begins at 4:00pm in CAS 502

Abstract:

The Solar Wind and Interplanetary Magnetic Field are strong drivers of the Earth's magnetosphere. Energy is continuously flowing into the magnetosphere and is either directly deposited in the Ionosphere or after being processed by magnetotail transport. We examine the characteristics and physics of various processes via which energy flows through the magnetosphere and to the ionosphere. Specifically, we examine how solar wind dynamic pressure impacts the MI coupling and the large scale magnetospheric currents, and study transport in the magnetotail via fast flows and their ionospheric footprint. We also look at inner magnetosphere cold plasma dynamics during storms using ground remote sensing techniques.