Space Science Seminar
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Coronal and Magnetospheric Observations of Reconnection

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The solar corona is rife with reconnecting magnetic fields, but the only method available to observe this process in the corona is through remote sensing observations. In this talk, I will review the current state of the art in observations of reconnection in the corona and make possible connections with reconnection processes happening in the magnetosphere. Many different effects of reconnecting magnetic fields have been observed in the corona, including shrinking (i.e. dipolarizing) flare loops, accelerating particles and apparent topology changes. Downflowing voids and and dense blob-like structures observed above post-flare arcades and during eruptions indicate that the reconnection process in the corona is turbulent and patchy. Turbulent processes are also important in understanding reconnection in the magnetosphere. After reviewing observations, I will pose some of the outstanding questions that exist in spite of (or because of) these observations.

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