



## HAO Colloquium Series

(Refreshments served)

**Speaker:** Sabrina Savage, NASA / MSFC

**Time:** 1:30–2:30 pm

**Date:** Wednesday, September 12, 2012

**Location:** CG1-2126

**Title:** A history of supra-arcade downflows and their connection to reconnection

### **Abstract:**

Following the eruption of a filament from a flaring active region, sunward-flowing voids are often seen above developing post eruption arcades. First discovered with Yohkoh's soft X-ray telescope, these supra-arcade downflows (SADs) are now an expected observation of extreme ultra-violet and soft X-ray coronal imagers and spectrographs. Observations made prior to the operation of the latest solar flagship mission, SDO/AIA, suggested that these plasma voids (which are seen in contrast to bright, high-temperature plasma associated with current sheets) are the cross-sections of large, evacuated flux tubes retracting from a reconnection site high in the corona. The latest observations no longer support this view. I will provide a short review of the history of SADs, discuss how AIA's capabilities have fundamentally shifted their interpretation, and delve into the most recent connections between SADs and magnetic reconnection theory.