

# Space Physics Seminar

Thursday, December 1, 2016



## The Boston University Small-Satellite Program



**Joshua Semeter, Brian Walsh, and friends**

*Boston University*

In 2007 the BU Satellite for Applications and Training (BUSAT) was selected for sponsorship by the Air Force's University Nano-satellite Program (UNP). Under the leadership of Prof. Ted Fritz, BUSAT blossomed into a high-profile hands-on university training program in space flight hardware, providing professional development to over 150 BU students from Engineering and the College of Arts and Sciences. This seminar, presented by faculty and student researchers, provides an overview of two current small satellite projects at BU, and gives a sense of the trajectory and potential of this program in light of the burgeoning international interest in small satellites. The ANDESITE mission (PI Josh Semeter) deploys a network of orbital micro-magnetometers ejected from a 6U cubesat bus. The resulting space-based sensor network will

be used to map small-scale variations in the Birkeland currents resulting from instabilities and wave dispersion in the near-Earth magnetosphere. The CuPID project (PI Brian Walsh) is a NASA sponsored cubesat mission to study soft x-rays emitted through solar wind-magnetosphere interactions. CuPID represents the first orbital flight of miniaturized telescope technology developed in collaboration with NASA Goddard, and will provide the first-ever wide-field x-ray images from space. This seminar is also an invitation for collaboration, as we seek to position Boston University as a national Center of Excellence in small satellite science and technology.

4:00pm in CAS 502. Refreshments served at 3:45pm in CAS 500.

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**Center for Space Physics**  
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