



## Photonics Forum

*January 29, 2016*

*11:45 a.m. -  
1:15 p.m.*

*9th Floor*

*Room 901*

*Photonics Center*

*8 Saint Mary's Street*

*Lunch will be served!*



## Photonics Faculty: Dr. Brian Walsh

### Using Small Spacecraft to Understand the near-Earth Space Environment

The near-Earth space environment provides a platform for communication and commercial industry as well as a laboratory for basic plasma physics. Historically, spacecraft placed in these regions have been large, expensive, and have taken a long time to develop. Small satellites, or cubesats, are low cost, rapidly developed alternatives. Cubesats also provide a low cost platform for high risk-high reward space technology developments. A review of small satellite development will be given as well as a tour of ongoing work with cubesats at BU and their role in understanding the near-Earth plasma environment through x-ray imaging.

Professor Walsh joined the Department of Mechanical Engineering at Boston University in the Fall of 2015. He is active in studying the near-Earth space environment and developing new space technologies. Prior to joining Boston University, Professor Walsh spent time as a researcher at the Space Science Laboratory at the University of California, Berkeley where he was involved with NASA's THEMIS spacecraft and NASA Goddard Space Flight Center where he was involved with NASA's Van Allen Probes spacecraft.

 Photonics Center

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