Boston University College of Arts & Sciences
Center for Space Physics

2017-2018 Space Physics and Astrophysics Seminar Series

Solar Sail Spacecraft Propulsion

NASA is developing solar sail propulsion for use by small robotic interplanetary spacecraft. Solar sails use sunlight to derive useful thrust by reflecting solar photons from a large, mirror-like sail made of a lightweight, highly reflective material. Using reflected sunlight to obtain thrust instead of relying on the use of reaction mass has many advantages for exploring the inner solar system, including extremely large total Delta-V and significant launch window flexibility. The Near Earth Asteroid Scout, scheduled for launch in 2019, will be NASA's first interplanetary solar sail mission. Topics covered will include the principles of operation for solar sails, the status of the technology, near-term scientific missions, and future mission applications.

Thursday, February 15 at 4:00PM
725 Commonwealth Avenue
Room 502

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Les Johnson
NASA Marshall Space
Flight Center