

**Boston University** College of Arts & Sciences Center for Space Physics

2018 - 2019 SPACE PHYSICS SEMINAR SERIES

## NASA's Juno Mission to Jupiter: What's Inside the Giant Planet?

Juno's principal goal is to understand the origin and evolution of Jupiter. Underneath its dense cloud cover, Jupiter safeguards secrets to the fundamental processes and conditions that governed our solar system during its formation. As our primary example of a giant planet, Jupiter can also provide critical knowledge for understanding the planetary systems being discovered around other stars. With its suite of science instruments, Juno is investigating the interior structure, mapping Jupiter's intense magnetic field, measuring the distribution of water and ammonia in the deep atmosphere. JUNO is also the first spacecraft to fly over Jupiter's aurora and measuring both the energetic particles raining down on the

planet and the bright "northern & southern lights" they excite. A huge bonus is the small public outreach camera that is taking fantastic images of Jupiter's beautiful clouds. The images – some science, some art – are processed and shared by the public around the world. NASA's JUNO mission was launched in August 2011 and has been in orbit over Jupiter's poles since 4th July 2016.



Thursday, September 13th 4:00 - 5:00 p.m. 725 Commonwealth Avenue | Room 502



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