



RSPR seminars

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“Scientific Results on Jupiter’s Atmosphere from the Juno Spacecraft and a Supporting Earth-Based Observational Campaign”

“Juno is spin-stabilized, solar-powered spacecraft currently in highly elliptical 53-day polar orbits around Jupiter, whose closest approaches are only a few thousand kilometers above the cloud tops and well below the bulk of the radiation belt that surrounds the planet. It is the second of a series of intermediate-cost interplanetary NASA missions, following the New Horizons mission to Pluto and a Kuiper-Belt Object. Juno’s mission is to investigate the deep atmosphere of Jupiter by detailed sensing of its gravitational field to sense the overall structure of the planet down to its core, sensing 0.1 to several hundred bars of pressure using infrared and microwave remote sensing, making a detailed map of Jupiter’s magnetic field, and understanding the relationship between the magnetosphere and auroral phenomena by simultaneous measurements of both. The mission engages the public with a visible imaging instrument intended for education and public outreach, which is also adding to Juno’s scientific output by observing routinely at unprecedented high spatial resolution near Jupiter’s terminator in polar regions, as well as at closest approach. Juno’s results are extended and enhanced by a coordinated campaign of Earth-proximal and ground-based observations. This talk will overview many of Juno’s scientific results to date but focus on the atmosphere, for which quite unanticipated discoveries have been and are continuing to be made”.



Wednesday, May 9th at 2 pm in Physics LTB