

The Juno Mission

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Abstract

The Juno mission is the second mission in NASA's New Frontiers program. Launched in August 2011, Juno arrives at Jupiter in 2016 for a one year prime mission. Juno science goals include the study of Jupiter's origin, interior structure, deep atmosphere, aurora and magnetosphere. Juno's orbit around Jupiter is a polar elliptical orbit with perijove approximately 5000 km above the visible cloud tops. The payload consists of a set of microwave antennas for deep sounding, magnetometers, gravity radio science, low and high energy charged particle detectors, electric and magnetic field radio and plasma wave experiment, ultraviolet imaging spectrograph, infrared imager and a visible camera. The Juno design enables the first detailed investigation of Jupiter's interior structure, and deep atmosphere as well as the first in depth exploration of Jupiter's polar magnetosphere. The Juno mission design and science goals will be presented.