

**Ben-Gurion University of the Negev
Blaustein Institutes for Desert Research**

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Jupiter's deep atmosphere revealed by Juno

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Abstract

Abstract: One of the key puzzles regarding Jupiter's appearance is the nature and origin of its banded structure. It is known that these zones and belts are related to the strong zonal flows in Jupiter's atmosphere, but the depth to which these flows extend has remained a mystery. The Juno spacecraft, which has been in orbit around Jupiter since July 2016, has been measuring very accurately Jupiter's gravity field. These measurement revealed that the Jupiter gravity field is north south asymmetric, and by this allowed determining the depth and character of Jupiter's zonal flows. In this talk, I will review the Juno gravity experiment, show how this allowed to determine the depth and vertical structure of Jupiter's zonal flows, and discuss what the gravity results imply about Jupiter's interior.

Date & Location:

Tuesday, April. 30, 2019, 11:00

Lecture room, Physics Building (ground floor)

