

## **Jovian Magnetic Field and Magnetosphere Postdoctoral Researcher**

Applications are now being accepted for a Postdoctoral Research Associate, funded through the University of Maryland College Park (UMCP) and the Center for Research and Exploration in Space Science and Technology (CRESST), to work in the Planetary Magnetospheres Laboratory of the NASA Goddard Space Flight Center (GSFC) in the area of Jupiter's magnetic field and magnetosphere, using data from the Juno (New Frontier) mission.

The Juno spacecraft arrives at Jupiter in July 2016. Juno is the first spacecraft to explore Jupiter from a close-in, polar orbit, seeking to unlock secrets about its origin and the origin of the solar system. Juno will probe deep into Jupiter's interior by mapping the giant planet's magnetic and gravity fields, peering well below the clouds to determine atmospheric composition, with particular interest in water abundance. Juno will also conduct a study of the polar magnetosphere and auroral phenomena, with fields and particles instruments and both infrared and ultraviolet spectrometers among the payload. Juno's Magnetic Field Investigation (MAG) employs two identical measurement platforms occupying a 4-meter magnetometer boom mounted at the outer end of one of Juno's three solar arrays. Each MAG optical bench supports a high-accuracy vector fluxgate magnetometer and a pair of star camera sensors for precision inertial attitude reference. These data and the global coverage of Jupiter provided by the mission plan will result in a detailed model of the Jovian internal field and an unprecedented view of the dynamo.

The selectee will work on site at GSFC in the Solar System Exploration Division as a member of the Juno Magnetometer Investigation Team, participating in data analysis and scientific studies, leading to publication of results in scientific journals. Candidates for this position should have a Ph.D. in a relevant scientific discipline with prior experience conducting scientific research. Experience with magnetometer instrumentation and data, disciplined programming skills (primarily Fortran and IDL), and scientific writing experience are desired.

The appointment will be initially for one year, with the possibility of renewal in subsequent years. Applicants may be new postdocs or may be more senior. Each applicant should send a Curriculum Vita, list of publications, statement of research interests, and contact information for three references to:

Juno Magnetometer  
CRESST/UMCP  
Mail Code 660.8, NASA/GSFC  
Greenbelt, MD 20771, or  
Via e-mail to [virginia.c.peles@nasa.gov](mailto:virginia.c.peles@nasa.gov)

Information regarding the Juno mission is found at <http://missionjuno.swri.edu/> and [http://www.nasa.gov/mission\\_pages/juno/main/](http://www.nasa.gov/mission_pages/juno/main/). Information on the Planetary Magnetospheres Laboratory is found at <http://science.gsfc.nasa.gov/solarsystem/magnetospheres/>. For information on CRESST and the UMCP's Department of Astronomy, please contact Tracy Huard ([thuard@astro.umd.edu](mailto:thuard@astro.umd.edu)).

**The University of Maryland is an Affirmative Action, Equal Opportunity Employer.  
Women and minorities are encouraged to apply.  
Applications will be accepted on an ongoing basis until the position is filled.**

