

Opportunity Title: Modeling Impact Processes on Ceres

Opportunity Reference Code: 0118-NPP-NOV23-JPL-PlanetSci

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0118-NPP-NOV23-JPL-PlanetSci

Application Deadline 11/1/2023 6:00:59 PM Eastern Time Zone

Description The surface of the dwarf planet Ceres reflects the nature of its impact history, near-surface material properties and internal processes. The composition and structure of the putative ice layer beneath Ceres' regolith and the processes that have shaped it can be investigated via models of the evolution of the surface topography as a function of its composition and temperature [1]. The goal is to understand the crater relaxation history and general crater morphology as a means to study the thermal and chemical evolution of Ceres, and assess its astrobiological potential. The research will also contribute to general understanding of the structure and evolution of icy bodies.

[1] Bland, M. (2013) Predicted crater morphologies on Ceres: Probing internal structure and evolution, *Icarus*, 226, 510-521.

Location:

Jet Propulsion Laboratory
Pasadena, California

Field of Science: Planetary Science

Advisors:

Carol Raymond
Carol.A.Raymond@jpl.nasa.gov
818-354-8690

Applications with citizens from Designated Countries will not be accepted at this time, unless they are Legal Permanent Residents of the United States. A complete list of Designated Countries can be found at: <https://www.nasa.gov/oirr/export-control>.

Eligibility is currently open to:

- U.S. Citizens;
- U.S. Lawful Permanent Residents (LPR);
- Foreign Nationals eligible for an Exchange Visitor J-1 visa status; and,
- Applicants for LPR, asylees, or refugees in the U.S. at the time of application with 1) a valid EAD card and 2) I-485 or I-589 forms in pending status

Eligibility Requirements • **Degree:** Doctoral Degree.



Whether you are just starting your career or already at a senior level, ORAU offers internships, fellowships, research opportunities, and contract positions that can provide you with invaluable experience. Download the ORAU Pathfinder mobile app and find the right opportunity to propel you along your career path!

Visit ORAU Pathfinder [↗](#)

