

Opportunity Title: Modeling of Europa's Space Environment
Opportunity Reference Code: 0219-NPP-NOV23-JPL-PlanetSci

Organization National Aeronautics and Space Administration (NASA)

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

Description The goal of this project is to develop a global modeling framework for Europa's space environment that incorporates Europa's plasma interaction, energetic particle bombardment, and atmosphere. This modeling framework will enable improved understanding of the effects of plasma interaction on retrieval of the European ocean parameters from the magnetic field data, and the effects of charged particle interactions on the surface. The approach is to couple three existing models for these features together to account for feedback between them and solve for consistent steady-state solutions. The postdoctoral researcher will work with Dr. C. A. Raymond to couple the models together, develop new codes, and analyze results. They will also collaborate with relevant members of the Europa Clipper Project Science Team to apply the model in support of planning for the Europa Clipper mission.

Location:

Jet Propulsion Laboratory
Pasadena, California

Field of Science: Planetary Science

Advisors:

Carol Raymond
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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/oijr/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.



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