Opportunity Title: Modeling of Giant Impacts in the Solar System
Opportunity Reference Code: 0334-NPP-MAR26-GSFC-PlanetSci

Organization National Aeronautics and Space Administration (NASA)

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How to Apply All applications must be submitted in Zintellect

Please visit the NASA Postdoctoral Program website for application instructions and requirements: How to Apply | NASA Postdoctoral Program (orau.org)

A complete application to the NASA Postdoctoral Program includes:

1. Research proposal
2. Three letters of recommendation
3. Official doctoral transcript documents

Application Deadline 4/2/2026 6:00:59 PM Eastern Time Zone

Description **About the NASA Postdoctoral Program**

The NASA Postdoctoral Program (NPP) offers unique research opportunities to highly-talented scientists to engage in ongoing NASA research projects at a NASA Center, NASA Headquarters, or at a NASA-affiliated research institute. These one- to three-year fellowships are competitive and are designed to advance NASA's missions in space science, Earth science, aeronautics, space operations, exploration systems, and astrobiology.

Description:

In the past two decades, increased awareness and knowledge of the role of giant impacts throughout the solar system has led to a reinterpretation of our understanding of planetary surfaces and orbits. Examples include the origin of the Moon through recondensation of material from a giant impact of a Mars-sized body (Theia) on the Earth; origin of the Martian hemispheric dichotomy; and even the rings and small moons of Saturn. However, much work remains to be done to fully understand these mechanisms and test against competing hypotheses. This project solicits proposals for modeling studies to better explain giant impact events throughout the solar system, with important implications for solar system formation and evolution, origins and sustainment of life, and future planetary protection.

Field of Science: Planetary Science

Advisors:

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Applications with citizens from Designated Countries will not be accepted at this time, unless they are Legal Permanent Residents of

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the United States. A complete list of Designated Countries can be found at: https://www.nasa.gov/oiir/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

Questions about this opportunity? Please email npp@orau.org

Qualifications The applicant should have prior experience in 3D hydrocode modeling of impacts, explosions or related areas. A PhD in physics, mathematics or related subject is required. The ideal candidate will be able to work independently with good written and oral skills in English, be a proficient presenter and communicator and at home working in a collaborative team environment at NASA.

Point of Contact Mikeala

Eligibility Requirements

- **Degree:** Doctoral Degree.