Opportunity Title: Understanding Planet Formation via Microlensing
Opportunity Reference Code: 0262-NPP-NOV23-JPL-Astrophys

Organization National Aeronautics and Space Administration (NASA)

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How to Apply All applications must be submitted in Zintellect

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

Description **Description:**

The Roman Space Telescope - the upcoming astrophysics flagship mission - will conduct a survey of exoplanets using microlensing. Roughly 1000 exoplanets will be detected at ~1-10 AU separations, enabling a Kepler-like statistical analysis of these central planet-forming locations. While the mission has formal requirements for detecting planets down to Mars masses, the interpretation of these detections remains an unsolved problem. The NPP fellow will use theoretical modeling techniques, e.g. population synthesis, to provide constraints on the physics of planet formation based on simulated Roman observations (and, eventually, based on the real data).

Field of Science: Astrophysics

Advisors:

Geoffrey Bryden
bryden@jpl.nasa.gov
818-393-4692

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/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

Eligibility Requirements

- **Degree:** Doctoral Degree.