

Opportunity Title: Exoplanets and their Host Stars

Opportunity Reference Code: 0242-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 6:00:59 PM Eastern Time Zone

Description Description:

Exoplanet-host stars with planets at short separations can influence each other (commonly termed the star- planet interaction or SPI), via a variety of mechanisms. Understanding SPI in exoplanet host stars is thus crucial for understanding the evolution of planets (and/or planetary systems) and their host stars, but observational evidence for SPI is generally scarce. An important signature of SPI is UV emission, and time-resolved FUV spectroscopy with HST/COS has provided compelling evidence for, and details of, the SPI phenomenon in HD189733, which has a Jupiter-mass planet. Prospective candidate will work on an analysis of the UV emission from star-exoplanet systems, using archival data from GALEX and HST, as well as a new HST program using COS spectroscopy to investigate SPI in the exoplanet host star Kepler-535, which hosts a 0.2 Jupiter-radius planet.

Field of Science: Astrophysics

Advisors:

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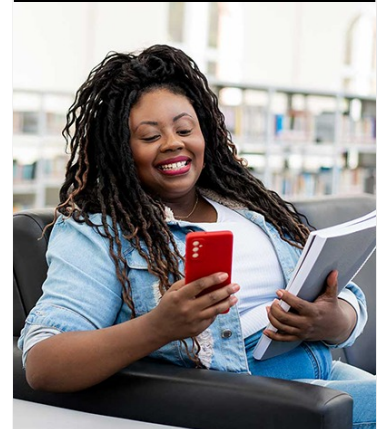
Applications with citizens from Designated Countries will not be accepted at this time, unless they are Legal Permanent Residents of the United States. A complete list of Designated Countries can be found at: <https://www.nasa.gov/oirr/export-control>.

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.



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