

Opportunity Title: JWST Exoplanet Theory Postdoctoral Fellow

Opportunity Reference Code: 0092-NPP-NOV23-ARC-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 Postdoctoral Fellow will work with a team of world-class collaborators on the JWST Cycle 1 GO Program 2512 (<https://www.stsci.edu/jwst/science-execution/program-information.html?id=2512>), which includes NIRSpec/BOTS transmission spectroscopy of 11 super-Earth and sub-Neptune transiting exoplanets detected by TESS. These observations will enable a range of investigations into the magnitude and origin of atmospheric diversity in small planets, and are also designed to enable population-level conclusions. The Postdoctoral Fellow will join a supportive, multi-institutional team of graduate students, other postdocs, and faculty/permanent researchers, and be encouraged to lead publications on individual planets/planet systems as well as contribute to team member led publications. Individual research will also be strongly encouraged.

Experience inferring atmospheric properties from spectroscopic observations of exoplanets is strongly preferred. This could include: 1) Experience in spectral inference (otherwise known as spectral retrieval), which involves using forward models in conjunction with Bayesian or machine learning-based techniques in order to derive posteriors on parameters of interest, such as atmospheric composition, and/or 2) Experience in forward models, which can take many different forms (e.g. climate, chemistry, cloud), as well as levels in complexity (e.g. 1D to 3D). However, we encourage applicants with other related skills as well.

Interested applicants should contact the advisor roughly a month prior to the proposal deadline to discuss and outline a research proposal.

Location:

Ames Research Center
Moffet Field, California

Field of Science: Planetary Science

Advisors:

Natasha Batalha
natasha.e.batalha@nasa.gov
650-604-2813

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:



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- 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.