

**Opportunity Title:** Observational Extragalactic Astronomy

**Opportunity Reference Code:** 0041-NPP-NOV23-ARC-Astrophys

**Organization** National Aeronautics and Space Administration (NASA)

**Reference Code** 0041-NPP-NOV23-ARC-Astrophys

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

**Description** Opportunities exist to participate in multi-wavelength investigations probing various aspects of galaxy evolution. Observations are currently being made through awarded time on space and ground-based facilities, and observational planning is under way for the use of future time on NASA's James Webb Space Telescope (JWST) and the Stratospheric Observatory for Infrared Astronomy (SOFIA) now under development.

Recent scientific programs aimed at galaxy evolution include investigations of isolated versus cluster galaxies of various morphological types (specific recent focuses have been early-type galaxies and dwarf irregulars) to identify environmental-dependencies of evolution through spectroscopic analysis of their stellar populations and star formation histories, and structural analysis of their spatial light distributions. Some key questions being addressed include: what is the formation history of isolated early type galaxies? What constraints or regulatory processes does cluster membership impose on chemical evolution? How do low-mass galaxies survive a cluster environment? To help answer these questions, improved methods for determining spatial chemical abundance distributions within galaxies, new approaches in spectral stellar population synthesis to take full advantage of available long wavelength baselines, and more robust techniques for deriving star formation histories are needed.

The postdoctoral researcher will carry out independent scientific research generally related to one or more of the above topics. Qualified candidates should have a Ph.D. in astronomy, physics, or a related discipline. Expertise in the reduction, analysis and interpretation of imaging or spectroscopic data are essential, and experience in multi-wavelength (UV-IR) analysis is highly desirable. Experience working in a scientific team environment is a plus, as are excellent organizational and problem-solving skills.

Interested applicants please contact the advisor.

**Location:**

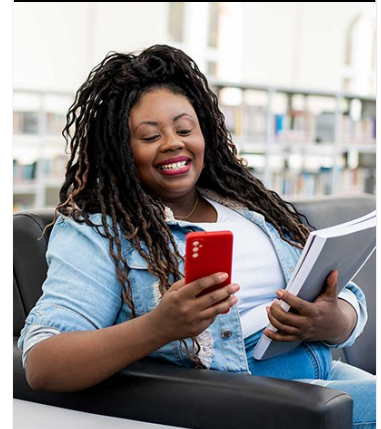
Ames Research Center  
Moffet Field, California

**Field of Science:** Astrophysics

**Advisors:**

Pamela M. Marcum  
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**Applications with citizens from Designated Countries will not be**



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**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.