Opportunity Title: Astrophysics: Galactic Science with the Wide-field Infrared Survey Explorer (WISE)
Opportunity Reference Code: 0106-NPP-NOV23-GSFC-Astrophys

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0106-NPP-NOV23-GSFC-Astrophys

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

Description WISE launched on December 14, 2009 and surveyed the entire sky at 3.4, 4.6, 12, and 22 microns. WISE found and characterized the most luminous galaxies in the universe, the coolest class of brown dwarf stars, and many new solar system objects. The “AllWISE” data release in November 2013 achieved 5-sigma point source sensitivities better than 0.06, 0.08, 0.8 and 5 mJy in unconfused regions on the ecliptic in the four wavelength bands. Sensitivity improves toward the ecliptic poles due to denser coverage and lower zodiacal background. The angular resolution in individual exposures is 6.1”, 6.4”, 6.5”, and 12.0” in the four bands, and the astrometric precision for high SNR sources is better than 0.1”. The AllWISE release includes a co-added and match-filtered FITS Image Atlas in the four bands, a Source Catalog of positions, apparent motions, and 4-band photometry for over 747 million objects, a Multiepoch Photometry Database with over 42 billion time-tagged flux measurements, and an Explanatory Supplement.

The successful candidate will use the WISE dataset, potentially complemented by other datasets and new observations, to study brown dwarfs, young stellar objects, debris disks, planet nine, star forming regions, or the Galactic interstellar medium. The Primary Advisor, Marc Kuchner, is the PI of two citizen science projects based on WISE data: DiskDetective.org and BackyardWorlds.org. He or an alternative Advisor will guide the appointee to ensure that the research will result in publications in the open literature.

Location:
Goddard Space Flight Center
Greenbelt, Maryland

Field of Science: Astrophysics

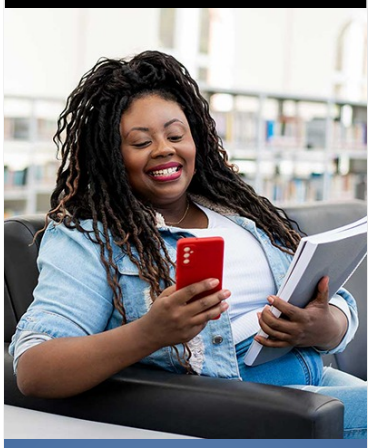
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Applications with citizens from Designated Countries will not be accepted at this time, unless they are Legal Permanent Residents of the United States. A complete list of Designated Countries can be found at: https://www.nasa.gov/oiir/export-control.

NPP NASA Postdoctoral Program

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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.