

Opportunity Title: Understanding the Connections between Large and Small Scale Structures in the Solar Wind

Opportunity Reference Code: 0316-NPP-MAR25-GSFC-Heliophys

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0316-NPP-MAR25-GSFC-Heliophys

How to Apply All applications must be submitted in [Zintellect](#)

Please visit the NASA Postdoctoral Program website for application instructions and requirements: [How to Apply | NASA Postdoctoral Program \(orau.org\)](#).

A complete application to the NASA Postdoctoral Program includes:

1. Research proposal
2. Three letters of recommendation
3. Official doctoral transcript documents

Application Deadline 3/1/2025 6:00:59 PM Eastern Time Zone

Description About the [NASA Postdoctoral Program](#)

The [NASA Postdoctoral Program \(NPP\)](#) offers unique research opportunities to highly-talented U.S. and non-U.S. scientists to engage in ongoing NASA research projects at a NASA Center, NASA Headquarters, or at a NASA-affiliated research institute. These one- to three-year fellowships are competitive and are designed to advance NASA's missions in space science, Earth science, aeronautics, space operations, exploration systems, and astrobiology.

Description:

There are various structures ranging from large-scale (such as coronal mass ejections and stream interaction regions) to small-scale (such as magnetic reconnections, ion beams, and ion-scale waves) in the solar wind. Large-scale structures can provide sufficient energy to drive small-scale changes in the solar wind. Although many studies are done for large-scale structures and small-scale structures individually, the connection between them remains a mystery and is not well investigated. Examining their relationship can offer critical insights into energy cascade processes cross scales.

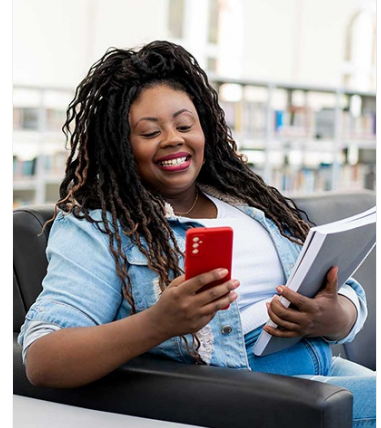
Parker Solar Probe mission launched in 2018 has reached regions as close as about 10 solar radii from the Sun and crossed the Alfvén surface. It offers a unique opportunity to explore very young solar wind. Therefore, the utilizing of PSP data for this science topic is highly recommended.

Field of Science: Heliophysics Science


Advisors:

Lan Jian

lan.jian@nasa.gov



Whether you are just starting your career or already at a senior level, ORAU offers internships, fellowships, research opportunities, and contract positions that can provide you with invaluable experience. Download the ORAU Pathfinder mobile app and find the right opportunity to propel you along your career path!

Visit ORAU Pathfinder 



Opportunity Title: Understanding the Connections between Large and Small Scale Structures in the Solar Wind

Opportunity Reference Code: 0316-NPP-MAR25-GSFC-Heliophys

(301) 286-3309

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

Questions about this opportunity? Please email npp@orau.org

Qualifications PhD degree in space physics, astrophysics, or related fields.

Experience of analyzing spacecraft data.

Point of Contact [Mikeala Lambertucci](#)

Eligibility Requirements • **Degree:** Doctoral Degree.