

**Opportunity Title:** Understanding the Sources of Energetic Particles in the Heliosphere

**Opportunity Reference Code:** 0120-NPP-NOV23-GSFC-HelioSci

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

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

### Description

A postdoctoral fellow, within the Heliophysics Division (code 672) at NASA/GSFC, would work closely with Drs. de Nolfo and Christian with a goal of facilitating the analysis and interpretation of energetic particle data within the Heliosphere. Despite sixty years of observations since their discovery, the origin of highest energy solar particles in space remains uncertain and is still debated within scientific circles. By "solar energetic particles" (SEP) one generally refers to electrons, protons or ions above several hundred keV that are presented after either a flare or a coronal mass ejection. Neutral radiation (e.g., X-rays, gamma-rays and neutrons), that often accompanies SEP events, provides additional and complementary information on particle acceleration. There is a wealth of data from the ACE, STEREO, Wind, PAMELA, and other missions, particularly Parker Solar Probe, launched in 2018, providing the first measurements of SEPs near the Sun. The postdoc fellowship would also include hardware development within the Energetic Particle Laboratory, working on both charged and neutral particle detection for upcoming mission opportunities. Hardware experienced is preferred.

### Location:

Goddard Space Flight Center  
Greenbelt, Maryland

**Field of Science:** Heliophysics Science

### Advisors:

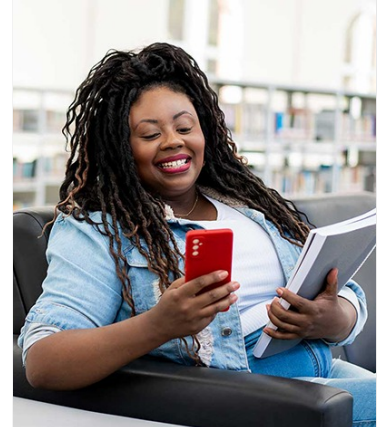
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**Applications with citizens from Designated Countries will not be accepted at this time, unless they are Legal Permanent Residents of the United States.** A complete list of Designated Countries can be found at: <https://www.nasa.gov/oiiir/export-control>.

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



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pending status

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