

**Opportunity Title:** Solar Prominences and Their Environment

**Opportunity Reference Code:** 0166-NPP-NOV23-GSFC-HelioSci

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

**Reference Code** 0166-NPP-NOV23-GSFC-HelioSci

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

**Description** Solar prominences (also known as filaments) are relatively cool, dense clouds of material suspended by the solar magnetic field in the much hotter, more rarefied solar corona. They form along inversion lines in the solar magnetic field and are a part of larger scale structure including the prominence channel and its extension into the corona, the prominence cavity. There are numerous open research questions concerning these structures. These include the questions of how the cool prominence material comes to be suspended in the corona and what governs its structure, dynamics, and evolution; the nature of the magnetic field in the cavity and how processes in the cavity relate to those in the prominence; and what processes are involved in eruptions of the prominence and cavity as parts of coronal mass ejections (CMEs). We study these topics using data from space mission including data from the Solar Dynamics Observatory (SDO), Hinode, Solar Terrestrial Relations Observatory (STEREO), Interface Region Imaging Spectrograph (IRIS), and Solar and Heliospheric Observatory (SOHO).

**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 pending status

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



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## **Requirements**