

Opportunity Title: Astrophysics: Active Galactic Nuclei and Starburst Galaxies

Opportunity Reference Code: 0001-NPP-NOV23-GSFC-Astrophys

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0001-NPP-NOV23-GSFC-Astrophys

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

Description An ongoing program consists of multiwavelength (x-ray, IR, optical and radio) spectral and imaging studies of active galaxies (AGN), starburst galaxies, starburst-AGN composite galaxies, and ultraluminous x-ray sources. AGN research focuses on studies of the iron K line and hard x-ray continuum with Suzaku, RXTE, Chandra, XMM and NuSTAR to discern properties of the accretion flow. AGN survey research focuses on connecting X-ray (Chandra, NuSTAR and XMM-Newton) properties with multiwavelength properties to study the connection between the black hole and its host galaxy. Research on starburst galaxies and composite galaxies centers on what IR (Spitzer and Herschel) and X-ray observations reveal about the starburst-AGN connection, properties of starburst outflows and AGN jets, and the formation and evolution of massive black holes and nearby galaxies.

We also looking for students to assist with simulations of local and distant galaxies to help assess and formulate future X-ray missions.

References:

Sicilian, D., Civano, F., et al. 2022, ApJ, 936, 39

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Fornasini, F. M., Civano, F., and Suh, H. 2020, MNRAS, 495

Civano, F.,? et al. 2016, ApJ, 819, 62

LaMassa, et al: ApJ 787, 61, 2014

LaMassa, et al: ApJ, 765, 33, 2013

Weaver and Melendez et al: ApJ 716, 1151, 2010

Brenneman and Weaver, et al: ApJ, 698, 528, 2009

Mattson, Weaver, and Reynolds: ApJ, 664, 101, 2007

Ptak, et al: ApJS, 166, 154, 2006

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Weaver, et al: ApJ 576, L19, 2002

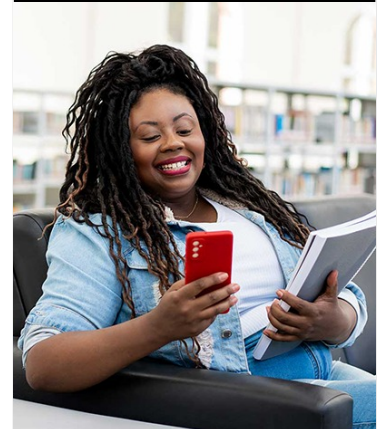
Location:

Goddard Space Flight Center
Greenbelt, Maryland

Field of Science:Astrophysics

Advisors:

Kimberly Ann Weaver



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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 Requirements • **Degree:** Doctoral Degree.