BOSTON UNIVERSITY

## Boston University College of Arts & Sciences Center for Space Physics

## 2022—2023 SPACE PHYSICS SEMINAR SERIES

## The Swift Solar Activity X-ray Imager (SSAXI-Rocket) for the Hi-C Flare Rocket

The <u>S</u>wift <u>S</u>olar <u>A</u>ctivity <u>X</u>-ray <u>Imager (SSAXI-Rocket)</u> Instrument funded by the NASA Low Cost Access to Space program to ride-along the High Resolution Coronal Imager (Hi-C) Flare rocket, scheduled for launch in 2024 as part of the Flare Campaign. SSAXIRocket is intended to observe the soft X-ray peak emission phase of a large solar flare. The SSAXI-Rocket instrument has peak sensitivity to 10 MK solar plasma, similar to the current HiC flare instruments and provides exploration of additional parameter space, including the variability in heating and energy transport of solar flares. SSAXI-Rocket combines X-ray focusing optics and a high speed readout detector to image the flare soft X-rays at a high time

cadence without image saturation and pixel signal blooming into adjacent pixels. This allows an unprecedented opportunity to image large flare hot plasma unobscured, with high contrast imaging. Additionally, the SSAXI investigation trains early career (postdocs, grad students, and undergrads) scientists and engineers in the development of space -flight hardware, science analysis, and mission operations.



**Thursday, March 30th** 4:00-5:00 p.m. 725 Commonwealth Ave | Room 502

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