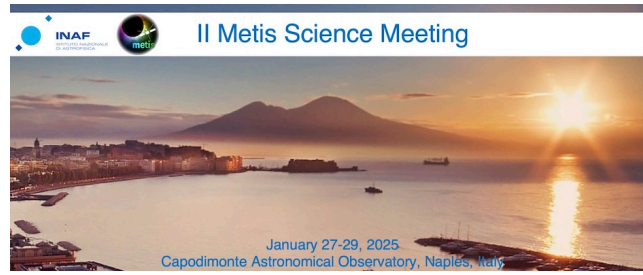


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3-Dimensional reconstruction of the thermal X-ray emission in solar flares

Since October 2022, for the first time, two indirect X-ray imagers, the Spectrometer/Telescope for Imaging X-rays (STIX) on board Solar Orbiter and the Hard X-ray Imager (HXI) on board the Chinese ASO-S mission, are simultaneously observing the Sun in the hard X-ray regime. Given that the two telescopes have different vantage points on the star, it is possible to combine their stereoscopic observations for addressing the 3-dimensional reconstruction of the thermal X-ray emission in solar flares. In this presentation, we describe our 3-dimensional imaging technique based on simultaneous observations of solar flares provided by STIX and HXI. We show preliminary results in the case of a flaring event that occurred on 2024 October 1, and we demonstrate the potential of this methodology for studying the thermodynamic properties of the flaring thermal emission.

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