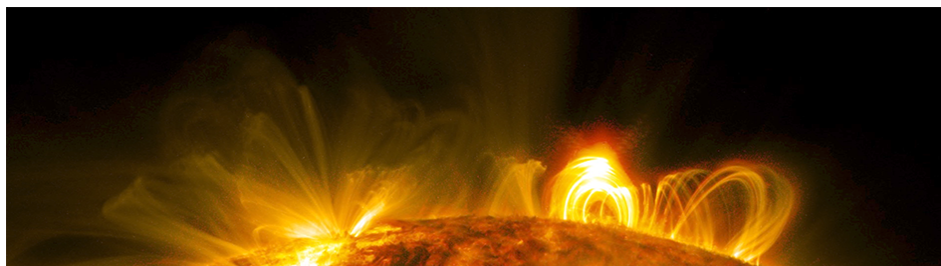


Particle Acceleration in Solar Flares and the Plasma Universe – Deciphering its features under magnetic reconnection



Contribution ID: 17

Type: **Invited talk**

The X-ray telescope STIX on Solar Orbiter: first results and future prospects

Monday 15 November 2021 12:00 (30 minutes)

Solar Orbiter is an ESA space mission that was successfully launched on February 10th, 2020, from Cape Canaveral. Its purpose is to improve our understanding of how the Sun creates and controls the heliosphere. The Spectrometer/Telescope for Imaging X-rays (STIX) is one of six remote-sensing instruments on board and provides imaging spectroscopy of the of solar flares in the 4-150 keV range. Thus, STIX is able to measure quantitatively both the parameters of the hot flare plasma and the characteristics of the accelerated electrons. Together with the other instruments on Solar Orbiter as well as with other space-borne and ground based observational assets, STIX will study energy release and particle acceleration in solar flares. IN this talk, the basic characteristics and capabilities of the instrument will be discussed, and the first results obtained during the cruise phase of Solar Orbiter (2020 and 2021) will be reviewed. Finally, the prospects for STIX in the upcoming science phase will be addressed.

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