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



Contribution ID: 44 Type: Poster

## **Introduction to STIX Spectroscopy**

Wednesday, 17 November 2021 09:45 (1 hour)

The Spectrometer/Telescope for Imaging X-rays (STIX) onboard the Solar Orbiter is dedicated to the study of solar flares. STIX measures HXR spectra in the range 4 to 150 keV with up to 1 keV resolution, binned on board into 30 scientifically useful energy bins over 32 pixellated detectors. These spectra are also binned in time between 20 seconds, at standard background level, down to 0.5 seconds during the peak of moderate flares. Interesting events can then be downloaded to Earth at up to this stored resolution based on the scientific rationale and available telemetry. The collection and format of our main science data products will be described along with the available and upcoming analysis software. Examples of spectra observed during the Near Earth Commissioning and Cruise Phases of Solar Orbiter demonstrating the initial capabilities of STIX will also be shown.

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