

# STIX team meeting in Genova May 19-21, 2025

<https://sites.google.com/view/stix-meeting-2025-19-21-may-20/home>

'final' agenda from May 12, 2025

**Guidelines:** invited talks (30 min), contributing talks (15 min), on-line talks (10 min)

Room: The conference will take place in Room 706 (see webpage to find conference site)

Zoom link: <https://fhnw.zoom.us/j/62844438369?pwd=E3VL9WyFBZM9He4Q7auLVmg7w1bduN.1>

## Monday May 19

### STIX update I 09:30-11:00

- Welcome
- STIX update (Säm Krucker)
- Detector update (Olivier Limousin)
- Latest results on the STIX data calibration process (Paolo Massa)
- Update pipeline (Shane Maloney)

### Coffee break 11:00-11:30

### STIX update II 11:30-13:00

- An in-depth analysis of background level registered by STIX in every pixel (Karol Kułaga)
- Five years of Solar Orbiter and STIX pointing (Frederic Schuller)
- STIX Imaging algorithms (Genova)
- MARLIN update (Wrocław)
- Greedy approaches for astronomical imaging (Anna Volpara)

### Lunch (included in registration fee) 13:00-14:00

### Invited presentations & highlights 14:00-15:30

- Invited: Metis observations and data archive (Lucia Abbo)
- Invited: Probing ion acceleration through multiwavelength observations of Solar flares (Melissa Pesce-Rollins)
- An overview of Solar Orbiter's major flare campaigns of Spring 2025 (Hannah Collier)

### Coffee break 15:30-16:00

### Invited presentations & highlights 16:00-17:30

- Invited: Updates on the FOXSI experiment (Lindsay Glesener)
- 3D Reconstructions of Solar Flares from Real STIX and HXI Data (Barbara Palumbo)
- Invited: STIX - A Retrospective (Gordon Hurford)

## Tuesday May 20

### Science contribution 09:30-11:00

- CoSEE-Cat: a Comprehensive Solar Energetic Electron event Catalogue (Alexander Warmuth)
- Updates from the Solar Orbiter Archive: Field-of-View Tool and Flare-SEP Linkage Tool (Nils Janitzek)
- ONLINE: Observations and modeling of solar flare energetic electrons in hard X-ray, radio and in-situ near 1 AU (Yuankun Kou)
- A new methodology for inferring the plasma conditions in solar flare energetic electron source regions from in-situ electron energy spectra (Samuel Carter)

### Coffee break 11:00-11:30

### Science contributions 11:30-13:00

- Probing seed electron characteristics through nonthermal emission and solar energetic electrons (SEEs): STIX and EPD observations (Arun Kumar Awasthi)
- Solar Flare Accelerated Electrons and their Radio Emission Along the Parker Spiral: Simulations and Simultaneous Observations from SoLO, PSP, STEREO & WIND (Daniel Clarkson)
- Transient and diverse coronal jets around an erupting filament captured by Solar Orbiter (Song Tan)
- Radio-monitoring Solar Radio Orbiter Instruments: tools for fast access to space and ground-based radio observations (Abdallah Hamini)
- Online: Close look at flares during recent Solar Orbiter perihelion from X-ray and radio perspective (Shilpi Bhunia/Laura Hayes)

### Lunch (included in registration fee) 13:00-14:00

### Science contributions 14:00-15:30

- Disentangling EUV Emission from the Solar Transition Region and Corona Using Solar Orbiter and SDO Observations and 3D Data-Constrained Modeling with GX Simulator (Gelu M. Nita)
- Prolific Solar Flare Factories: Monitoring Active Region Nests with Solar Orbiter (Adam Finley)
- Analysis of intense flares occurring on a long-lasting active nest in the Sun as seen by SolarOrbiter/STIX (Allan Sacha Brun)
- Sympathetic flares and magnetohydrodynamical avalanches (Antoine Strugarek)

### Coffee break 15:30-16:00

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| <b>Science contribution:</b> | <b>16:00-17:45</b> |
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- Reduction of the Downward Energy Flux of Nonthermal Electrons in the Solar Flare Corona due to Co-spatial Return-current Losses (Meriem Alaoui)
- Hard X-ray Intensity Profiles in a Solar Flare Atmosphere with Turbulent Thermal and Electrical Conductivities (Gordon Emslie)
- Using the python based SunKit-Spex to fit STIX spectra (Jake Mitchell)
- Online: Total Power and Low-energy Cut-off Time Evolution of Solar Flare Accelerated Electrons Using X-Ray Observations and Warm-Target Model (Debesh Bhattacharjee)
- Online: Characterizing Flare-Associated Electrons with HXR Warm-Target and DEM Diagnostics (Yingjie Luo)

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| <b>Dinner (details will be provided on the webpage)</b> | <b>~20:00</b> |
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## Wednesday May 21

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| <b>Science contribution</b> | <b>09:30-11:15</b> |
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- What Do STIX Flares Look Like? A Statistical Exploration of Flare Time Profiles (Laura Hayes)
- Imaging the superhot thermal component with STIX (Muriel Zoë Stiefel)
- Emission Measure Imaging from STIX Data (Alessia Guidetti)
- Observations of a faint non-thermal emission during a GOES C-class flare (Natalia Bajnokova)
- TEMIRA performance for synthetic Palermo-Harvard flare models (Janus Sylwester)

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| <b>Coffee break</b> | <b>11:15-11:45</b> |
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| <b>Science contribution</b> | <b>11:45-13:15</b> |
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- New insights into hard microflares (Andrea Francesco Battaglia)
- In search for strongly non-thermal flares using CNN-based machine learning algorithm (Dominik Gronkiewicz)
- Flares in X-ray and optical emission observed at Ondřejov observatory (Jana Kašparová)
- Limb-Occulted Flare Observations with HXI, GBM, and STIX (Säm Krucker)

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| <b>Lunch (individual)</b> | <b>13:00-14:00</b> |
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| <b>Splinter sessions</b> | <b>14:00-17:30</b> |
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- Question & answer: Analysis of specific flares
- Spectral fitting
- Flare list: next steps
- TBD