ISSI-BJ Forum on *Surveying the hot baryons within the Milky Way*

**Preliminary programme (v250522b)**

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| Monday 09 June 2025 |
| 09:00–09:10 | Welcome & Introduction | Xiaolong Dong  |
| Session 1 (Chair: Wei Cui)  |
| 09:10–09:25 | Introduction to Diffuse X-ray Explorer | Junjie Mao |
| 09:25–09:50 | DIXE Collimator Response & Algorithm Implementation of DIXE Imaging | Jiejia Liu |
| 09:50–10:05 | Geant4 Simulation of DIXE Non-X-ray Background | Ruixuan Tian  |
| 10:05 - 10:20 | Open Discussion  |
| 10:20–10:40 | Coffee Break |
| Session 2 (Chair: Ping Zhou) |
| 10:40–11:00 | The Soft X-ray Background as Observed by eROSITA | Gabriele Ponti  |
| 11:00–11:20 | SRG/eROSITA & the First Uncontaminated View of the Diffuse Soft X-ray Sky  | Konrad Dennerl  |
| 11:20–11:40 | Observing the Local ISM with X-ray Eyes | Michael Yeung  |
| 11:40–12:00 | Open Discussion  |
| 12:00–12:10 | Group Photo |
| 12:10–14:00 | Lunch Break |
| Session 3 (Chair: Li Ji) |
| 14:00–14:20 | SRG/eROSITA Results on the Eastern Galactic Hemisphere | Marat Gilfanov |
| 14:20–14:40 | ART-XC Results on Compact & Extended Sources in the Milky Way | Alexander Lutovinov  |
| 14:40–15:00 | Diffuse X-ray Emission of the Milky Way at Different Spatial Scales | Roman Krivonos  |
| 15:00–15:20 | Open discussion  |
| 15:20–15:50 | Coffee Break |
| Session 4 (Chair: Gabriele Ponti) |
| 15:50–16:10 | eROSITA Broad Band Maps  | Jeremy Sanders (online) |
| 16:10–16:30 | eROSITA Narrow Band Maps at the Energies of Soft X-ray Emission Lines | Xueying Zheng  |
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| 16:30–16:50 | The Hot Gas Phase of the Milky Way as Seen by eROSITA | Nicola Locatelli  |  |
| 16:50–17:10 | Galactic Magnetized Halo Related to the eROSITA Bubbles | Heshou Zhang  |  |
| 17:10–17:40 | Open Discussion  |  |
| **18:00** | **Social Dinner at Second Floor Park Plaza Hotel** |  |
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| **Tuesday 10 June 2025** |  |
| Session 5 (Chair: Johan Comparat) |  |
| 09:00–09:20 | Supernova Remnant Study with the Einstein Probe | Ping Zhou  |  |
| 09:20–09:40 | Probe Resonant Scattering & Charge Exchange in the X-ray Emission of Supernova Remnants | Lei Sun  |  |
| 09:40–10:00 | Dissecting the Thermal X-ray Emission from Nearby Supernova Remnants with SRG/eROSITA | Martin Mayer  |  |
| 10:00–10:20 | Open Discussion  |  |
| 10:20–10:40  | Coffee Break |  |
| Session 6 (Chair: Marat Gilfanov) |  |
| 10:40–11:00 | Charge-exchange Emissions in Stellar wind Interaction with ISM | Guiyun Liang  |  |
| 11:00–11:20 | SMILE: Solar wind Magnetosphere Ionosphere Link Explorer | Yuqi Gong |  |
| 11:20–11:40 | The Multiphase Diffuse Gas in & Around the Milky Way | Zhijie Qu  |  |
| 11:40–12:00 | Open Discussion  |  |
| 12:00–14:00 | Lunch Break |  |
| Session 7 (Chair: Yang Chen) |  |
| 14:00–14:20 | Review the Past Flare of Sgr A\* Based on the XRISM Spectrum | Shui-Nai Zhang |  |
| 14:20–14:40 | Average Hot CGM X-ray Surface Brightness in Local Universe (z<0.2) | Yi Zhang  |  |
| 14:40–15:00 | The Cross-correlation Between Soft X-rays & Galaxies- A New Benchmark for Galaxy Evolution Models | Johan Comparat  |  |
| 15:00–15:20 | Open Discussion  |  |
| 15:20–16:00 | Coffee Break |  |
| 16:00-17:00 | Open Discussion  |  |
| 17:00 | End of Forum  |  |

Open discussion I:

* How to maximize the DIXE scientific returns while reducing internal compitetion

Open discussion II:

* Region of interests to study MW hot baryons with eROSITA, XMM-Newton, DIXE

Open discussion III:

* How to collaborate with eROSITA-RU

Open discussion IV:

* Region of interests to study MW hot baryons with XMM-Newton, DIXE, eROSITA, EP

Open discussion V:

* SNR and superbubbles of interests with DIXE, eROSITA, EP

Open discussion VI:

* How to advance our knowledge of CX and LHB with DIXE, eROSITA, EP, SMILE

Open discussion VII:

* How to apply our knowledge learned from external galaxies to hot baryons in MW

Open discussion VIII:

* Preparation for the review paper in Taikong magazine (not peer-reviewed) and RAA (peer-reviewed). Same article for both journals.
* Setting milestones and listing action items