

2022 EAS S5: Towards the next generation of X-ray surveys with *Athena* Programme

S5a: Thu. 30th Jun. 09:00 - 10:30. Room 8

Chair: Silvia Martínez-Núñez

- 09:00 - 09:30: The *Athena* X-ray observatory: prospective science and mission status. **Francisco J. Carrera (IFCA)**.
- 09:30 - 10:00: Expectations for AGN population and evolution studies with *Athena* in perspective to previous and ongoing surveys. **Giorgio Lanzuisi (INAF-OAS)**.
- 10:00 - 10:15: A new multi-wavelength approach for finding Compton thick AGNs: implications for the *Athena* X-ray observatory. **Brivael Laloux (National Observatory of Athens & Durham University)**.
- 10:15 - 10:30: A Hubble diagram of quasars at high redshift with *Athena* serendipitous observations. **Guido Risaliti (University of Florence)**.

S5b: Thu. 30th Jun. 11:15 - 12:45. Room 8

Chair: Natalie Webb

- 11:15 - 11:45: AGN population and evolution studies with eROSITA. **Johannes Buchner (MPE)**.
- 11:45 - 12:00: An X-ray and Radio View of AGN Accretion and Feedback with eROSITA and LOFAR. **Zsofi Igo (MPE)**.
- 12:00 - 12:15: *Athena* Takes Hard X-ray Spectroscopy from the Local Universe out to the Cosmic Noon. **Mislav Balokovic (Yale University)**.
- 12:15 - 12:30: The AGN population to be discovered by *Athena*. **Melanie Habouzit (Zentrum Fur Astronomie & MPfA)**.
- 12:30 - 12:45: The detection of $z > 5.5$ quasars with eROSITA. **Julien Wolf (MPE)**.

S5c: Thu. 30th Jun. 17:30 - 19:00. Room 8

Chair: Mara Salvato

- 17:30 - 18:00: eROSITA to *Athena*: Cluster Science and Cosmology with X-ray Surveys.
Esra Bulbul (MPE).
- 18:00 - 18:15: The low-end of the black hole mass function at cosmic dawn.
Alessandro Trinca (Sapienza University of Rome).
- 18:15 - 18:30: Unravelling the census of supermassive black hole spin with *Athena*.
Peter Boorman (Astronomical Institute of the Czech Academy of Sciences).
- 18:30 - 19:00: X-ray surveys of binary populations in nearby galaxies: insights from Chandra and XMM to future prospects with eROSITA and *Athena*. **Antara Basu-Zych (UMBC & NASA/GSFC).**

S5d: Fri. 1st Jul. 09:45 - 10:30. Room 8

Chair: Stefano Ettori

- 09:45 - 10:00: Cosmic metals and missing baryons in EAGLE filaments. **Toni Tuominen (Tartu Observatory, University of Tartu).**
- 10:00 - 10:15: Galaxy clusters outskirts: lands of unobserved accretion sources. **Matteo Angelinelli (University of Bologna & INAF-OAS).**
- 10:15 - 10:30: Incidence of AGN in massive galaxy clusters: from Chandra to *Athena*. **Iván Muñoz Rodríguez (National Observatory of Athens and Southampton University).**

S5e: Fri. 1st Jul. 11:15 - 12:30. Room 8

Chair: Matteo Guainazzi

- 11:15 - 11:30: New constraints on Axion-Like Particles from the cluster-hosted quasar H1821+643, and a promising future with *Athena*. **Julia Margalida Sisk Reyes (Institute of Astronomy, University of Cambridge).**
- 11:30 - 11:45: The Cosmological evolution of galaxies as seen with *Athena*. **Andreas Zezas (University of Crete & Institute of Astrophysics Forth).**
- 11:45 - 12:00: The Outskirts and the Filaments of the A3391/95 System with eROSITA. **Angie Veronica (AlfA/University of Bonn).**
- 12:00 - 12:15: The X-ray Luminosity function of galaxies from the CDFS 7Ms Survey and high-*z* predictions for *Athena* with SPRITZ. **Carlotta Gruppioni (INAF-OAS).**
- 12:15 - 12:30: What do observations of the cosmic 21-cm signal imply for *Athena*. **Andrei Mesinger (Scuola Normale Superiore).**

S5f: Fri. 1st Jul. 17:30 - 18:30. Room 8

Chair: Arne Rau

- 17:30 - 17:45: Counterpart rates to massive black hole binary mergers in the LISA-*Athena* era. **Alberto Mangiagli (APC)**.
- 17:45 - 18:00: Surveying the X-ray sky with XMM-*Newton* to find transients. **Natalie Webb (IRAP)**.
- 18:00 - 18:15: Measuring the mass and the spin of intermediate-massive black hole candidates using tidal disruption events. **Zheng Cao (SRON)**.
- 18:15 - 18:30: **ePosters presentations:**
 - Hydrostatic bias in the FLAMINGO simulations. **Joey Braspenning (Leiden Observatory)**.
 - The X-ray emission of star-forming galaxies detected in the eROSITA survey and their connection with stellar populations. **Elias Kyritsis (Institute of Astrophysics, Forth & University of Crete)**.
 - XMM-*Newton* follow-up of a sample of galaxy groups detected in the ROSAT All-Sky Survey. **Claudia Spinelli (AlfA)**.
 - Influence of the binary parameters on the X-ray signature of circumbinary disks around binary black holes. **Raphaël Mignon-Risse AstroParticule & Cosmologie (Paris)**.