

# XMM-Newton: The Next Decade

## ESA/ESAC 2016 May 9-11

### Programme

#### Monday May 09

08:15 – 09:15	Registration	
09:15 – 10:30	<b>Session I: Present X-ray missions</b>	Chair: Norbert Schartel
09:15 – 09:20	Norbert Schartel: Welcome	
09:20 – 09:30	Martin Ward: Introduction	
09:30 – 09:45	Belinda Wilkes: 10+ more years of Chandra-XMM-Newton Synergy	
09:45 – 10:00	Takaya Ohashi: Report of Hitomi (ASTRO-H)	
10:00 – 10:30	<b>Jelle Kaastra: High-resolution X-ray spectroscopy: the coming-of-age</b>	
10:30 – 11:00	<b>Session II: Future X-ray missions</b>	
10:30 – 10:45	Xavier Barcons: Athena: ESA's X-ray observatory to study the Hot and Energetic Universe in the late 2020s	
10:45 – 11:00	Peter Predehl: E-ROSITA (synergies)	
11:00 – 15:20	<b>Session III: Complementary issues (multi-wavelength synergies)</b>	
11:00 – 11:15	Raffaella Morganti: Synergy with new radio facilities: from LOFAR to SKA	
11:15 – 11:30	Helen Russell: Synergies with ALMA and mm/submm facilities	
11:30 – 12:00	Coffee Break & Poster Viewing	
	<b>Session III (cont.): Complementary issues (multi-wavelength synergies)</b>	Chair: Maria Santos-Lleo
12:00 – 12:15	David Alexander: Synergies with the Infrared	
12:15 – 12:30	Vincenzo Mainieri: Perspectives for High-Energy Astrophysics at ESO	
12:30 – 12:45	Xavier Luri: Gaia: status, upcoming data releases and the mission archive	
12:45 – 13:00	Werner Hofmann: Synergies with CTA and VHE Astrophysics	
13:00 – 13:30	<b>Discussion: X-ray &amp; Synergy</b>	
	<b>Led by D. Alexander, X. Barcons, J. Kaastra, B. Wilkes</b>	
13:30 – 15:00	Lunch	
15:00 – 16:40	<b>Session IV: Solar system, exo-planets, Stars "hot/cool"</b>	Chair: Jan-Uwe Ness
15:00 – 15:30	<b>Jürgen Schmitt: Exoplanets and their Host Star</b>	
15:30 – 15:45	Graziella Branduardi-Raymont: X-ray studies of solar system objects: now and the next decade	
15:45 – 16:15	<b>Beate Stelzer: Cool Star X-ray Variability</b>	
16:15 – 16:25	Christian Schneider: Stellar X-ray accretion signatures	
16:25 – 16:40	Gregor Rauw: Perspectives for Hot Stars in the Next Decade	
16:40 – 17:10	Coffee Break & Poster Viewing	
17:10 – 18:30	<b>Session V: Compact Objects I: BH and Neutron star systems, SN/GRBs</b>	Chair: Lara Sidoli
17:10 – 17:40	<b>Nanda Rea: Magnetars: recent discoveries and synergies with multi-band facilities</b>	
17:40 – 17:50	Francesco Coti Zelati: The X-ray outburst of the Galactic Centre magnetar SGR 1745-2900 during the first 1.5 year	
17:50 – 18:00	Hiroaki Murakami: A new approach to observe toroidal magnetic fields of magnetars	
18:00 – 18:30	<b>Discussion: Planets &amp; Stars &amp; Magnetars</b>	
	<b>Led by G. Branduardi-Raymont, G. Rauw, N. Rea, B. Stelzer</b>	

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#### Tuesday May 10

09:00 – 11:05	<b>Session VI: Compact Objects I: BH and Neutron star systems, SN/GRBs</b>	Chair: Joern Wilms
09:00 – 09:10	Nora Loiseau: An XMM-Newton Science Archive for next decade, and its integration into ESASky	
09:10 – 09:20	Andrea De Luca: The EXTraS project: Exploring the X-ray Transient and variable Sky	
09:20 – 09:30	Adriana Mancini Pires: Follow-up of isolated neutron star candidates from the eROSITA survey	
09:30 – 09:40	Alice Borghese: Phase-dependent absorption features in X-ray spectra of XDINSs	
09:40 – 09:50	Jun Yang: X-ray Sources in the Magellanic Clouds: analysis of 15 Years of XMM-Newton and Chandra Observations	
09:50 – 10:00	Lara Sidoli: XMM-Newton and NuSTAR joint observation of the periodic Supergiant Fast X-ray Transient IGR J11215-5952	
10:00 – 10:10	Carlo Ferrigno: Glancing through the accretion column of EXO 2030+375	
10:10 – 10:25	Matt Middleton: Binaries across the spectrum - the case for simultaneous multi-wavelength studies	
10:25 – 10:35	Montserrat Armas Padilla: Very faint X-ray binaries with XMM-Newton	
10:35 – 10:45	Michael Nowak: Leveraging High Resolution Spectra to Understand the Disk and Relativistic Iron Line of Cygnus X-1	
10:45 – 11:55	Ciro Pinto: XMM-Newton reveals extreme winds in ultraluminous X-ray sources	
10:55 – 11:05	Felix Fuerst: Coronal geometry at low mass-accretion rates from XMM and NuSTAR spectra	
11:05 – 11:30	Coffee Break & Poster Viewing	
11:30 – 13:30	<b>Session VII: Compact Objects II: supermassive black holes</b>	Chair: Jacobo Ebrero
11:30 – 12:00	<b>Massimo Cappi: Outflows, Feedback and SMBH/Galaxy Co-Evolution</b>	
12:00 – 12:10	Ken Pounds: XMM-Newton, powerful AGN winds and galaxy feedback	
12:10 – 12:20	George Chartas: Magnified Views of Relativistic Outflows in Gravitationally Lensed Quasars	
12:20 – 12:30	Francesco Tombesi (Andrew Lobban*): Can supermassive black holes influence the evolution of their host galaxies?	
12:30 – 12:45	William N. Brandt: High-Redshift AGNs and the X-SERVS Survey	
12:45 – 12:55	Ehud Behar: Combined X-Ray and mm-Wave Observations of Radio Quiet Active Galaxies	
12:55 – 13:05	Pierre-Olivier Petrucci: On the Origin of the Soft X-ray excess in radio quiet AGN	
13:05 – 13:30	<b>Discussion: Binary &amp; AGN</b>	
	<b>Led by S. Komossa, F. Paerels, J. Wilms</b>	
13:30 – 15:00	Lunch	
	<b>Session VII (cont.): Compact Objects II: supermassive black holes</b>	Chair: Richard Saxton
15:00 – 15:15	Stefanie Komossa: Tidal Disruption of Stars by Supermassive Black Holes	
15:15 – 15:25	Alessandra De Rosa: Unveiling the AGN activity in multiple SMBH systems: the remarkable case of SDSS J0959+1259	
15:25 – 15:35	Margherita Giustini: XMM-Newton reveals matter accreting onto the central supermassive black hole of NGC 2617	
15:35 – 16:05	<b>Ian McHardy: The origin of UV-optical variability in AGN and its relationship to X-ray variability</b>	
16:05 – 16:20	Andrew Fabian: Reverberation Mapping: Status and Future	
16:20 – 16:30	Jiri Svoboda: AGN spectral states from simultaneous UV and X-ray observations by XMM-Newton	
16:30 – 17:00	Coffee Break & Poster Viewing	
17:00 – 18:30	<b>Session VIII: Diffuse emission I; SNRs</b>	Chair: Carlos Gabriel
17:00 – 17:30	<b>Anne Decourchelle: Supernova Remnants</b>	
17:30 – 17:40	Marco Miceli: Investigating the galactic Supernova Remnant Kes 78 with XMM-Newton	
17:40 – 17:50	Hidetoshi Sano: Detailed studies of shock-cloud interaction toward the young supernova remnants	
17:50 – 18:00	Gerd Pühlhofer: X-ray observations of Galactic H.E.S.S. sources: an update	
18:00 – 18:30	<b>Discussion: AGN &amp; SNR</b>	
	<b>Led by M. Cappi, G. Chartas, A. Decourchelle, I. McHardy</b>	
21:00 – 00:00	Conference Dinner	

\*Presenter if different from first author

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#### Wednesday May 11

09:00 – 09:45	<b>Session IX: Diffuse emission II; Halos, WHIM and dark matter</b>	Chair: Anna Lia Longinotti
09:00 – 09:15	Joel Bregman: The Hot Gaseous Halos of Spiral Galaxies	
09:15 – 09:30	Fabrizio Nicastro: A Decade of WHIM search: Where do We Stand and Where do We Go	
09:30 – 09:45	Alexey Boyarsky (Oleg Ruchayskiy*): The Nature of Dark Matter (including alternative interpretations)	
09:45 – 13:30	<b>Session X: Diffuse emission II; large-scale outflows, Clusters of Galaxies</b>	
09:45 – 10:00	Frank Haberl: What have we learned from the XMM-Newton surveys of Local Group Galaxies?	
10:00 – 10:15	Dominique Eckert: Cluster outskirts and the missing baryons	
10:15 – 10:25	Fabio Gastaldello: The XMM view of the outskirts of galaxy groups	
10:25 – 10:35	Silvano Molendi: EPIC 2.0: a second youth for XMM-Newton's workhorse	
10:35 – 10:45	Massimo Gaspari: Quenching the X-ray spectrum of hot halos with AGN outflows and turbulence	
10:45 – 10:55	Daniel Q. Wang: Baryon content and dynamic state of galaxy clusters	
10:55 – 11:25	Coffee Break & Poster Viewing	
	<b>Session X (cont.): Diffuse emission II; large-scale outflows, Clusters of Galaxies</b>	Chair: Simone Migliari
11:25 – 11:40	Jelle de Plaa: CHEERS: The Chemical Enrichment RGS Sample	
11:40 – 12:10	<b>Etienne Pointecouteau: The Role of XMM for Present and Next Generation SZ Experiments</b>	
12:10 – 12:20	Toru Sasaki: Mass-to-Light-Ratios of the galaxy clusters and groups observed with Suzaku	
12:20 – 12:30	Lorenzo Lovisari: Characterizing Planck SZ detected clusters with X-ray observations	
12:30 – 12:40	Iacopo Bartalucci: Towards combined analysis of the most distant massive galaxy clusters with XMM and Chandra	
12:40 – 12:55	Eugene Churazov: What X-ray images and CCD energy resolution can tell us about the physics of ICM	
12:55 – 13:30	<b>Discussion: Galaxies &amp; Cluster</b>	
	<b>Led by J. Bregman, A. Fabian, M. Pierre, T. Reiprich</b>	
13:30 – 15:00	Lunch	
15:00 – 18:00	<b>Session XI: Surveys &amp; Cosmology</b>	Chair: Eleni Kalfountzou
15:00 – 15:15	Andrea Comastri: Deep X-ray surveys	
15:15 – 15:25	Giorgio Lanzuisi: Compton Thick AGN in the XMM-COSMOS field	
15:25 – 15:35	Stephanie LaMassa: The Wide-Area X-ray Survey in the Legacy Stripe 82 Field	
15:35 – 15:50	Guido Risaliti: Cosmology with AGN: can we use quasars as standard candles?	
15:50 – 16:05	Marguerite Pierre: The XXL survey: first results and future	
16:05 – 16:30	Coffee Break & Poster Viewing	
	<b>Session XI (cont.): Surveys &amp; Cosmology</b>	Chair: Matthias Ehle
16:30 – 17:00	<b>Monique Arnaud: Evolution of Clusters and Cosmology</b>	
17:00 – 17:30	<b>Thomas Reiprich: Follow-up of eROSITA and Euclid Clusters</b>	
17:30 – 18:00	<b>Discussion: Cosmology &amp; Summary</b>	
	<b>Led by M. Arnaud, T. Ohashi, J. Schmitt, M. Ward</b>	

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