

XMM-Newton Workshop 2024: Speaker programme

**Wednesday 5 June
09:00-18:45 plus cocktail**

08:30-08:45	Badges pick-up	
08:45-09:00	Brief welcome and LOC announcements	
09:00-11:00	Session I	Chair: TBD
09:00-09:30	A. Karastergiou: A current view of the population of non-recycled radio pulsars	
09:30-10:00	N. Hurley-Walker: Long period pulsars	
10:00-10:15	M. Ronchi: <i>The mystery of long-period pulsars</i>	
10:15-10:30	J. Kurpas: New thermally emitting isolated neutron stars from SRG/eROSITA	
10:30-11:00	A. Pearlman: An X-ray view of Fast Radio Burst	
11:00-11:30	Coffee break	
11:30-13:15	Session II	Chair: TBD
11:30-12:00	A. Borghese: The strongest magnets of the Universe	
12:00-12:15	R. Stewart: <i>Detailed Phase-Resolved Spectroscopic and Spectro-polarimetric Analysis of Magnetar 1RXS J170849.0-400910 with XMM-Newton, NuSTAR, and IXPE</i>	
12:15-12:30	A. Ibrahim: <i>The 2022 reactivation of the magnetar SGRJ1935+2154</i>	
12:30-12:45	J. Mahlmann: <i>Numerical study of X-ray emission in the radiation-rich environment of magnetar magnetospheres</i>	
12:45-13:00	J. Petri: <i>Modelling the non-thermal X-ray emission of pulsars from their multi-wavelength pulse profiles</i>	
13:00-13:15	R. Kelly: <i>Is Polarisation the Key to Understanding Magnetar Emission? - Mode Conversion in a Magnetar Atmosphere</i>	
13:15-14:45	Lunch	
14:45-16:30	Session III	Chair: TBD
14:45-15:15	G. L. Israel: Beyond Accretion Limits: the Rise Of pulsating Gems	
15:15-15:30	H. Earnshaw: <i>The long-term variability of a population of ULXs monitored by Chandra</i>	
15:30-15:45	M. Imbrogno: <i>The QPOs awaken in the quest for pulsating ULXs</i>	
15:45-16:00	D. Misra: <i>Exploring the nature of ultra-luminous X-ray sources across stellar population ages using detailed binary evolution calculations</i>	
16:00-16:30	Poster session	
16:30-17:00	Coffee break	
17:00-18:45	Session IV	Chair: TBD
17:00-17:15	R. Amato: <i>Investigating the ULX population with machine learning techniques</i>	
17:15-17:30	F. Fürst: <i>The surprising long-term evolution of the ULXP NGC 7793 P13</i>	
17:30-18:00	A. Shaw: Recent Results on Magnetic Cataclysmic Variables	
18:00-18:15	S. Scaringi: <i>Self-similar accretion modes between accreting white dwarfs and neutron stars</i>	
18:15-18:30	A. Rodríguez: <i>Accreting White Dwarfs in the X-ray + Optical Sky with SRG/eROSITA and ZTF</i>	
18:30-18:45	M. Veresvarska: <i>Unveiling the Role of Magnetic Field in Generating Quasi-Periodic Oscillations: Insights from Accreting White Dwarf Systems</i>	
18:45	Welcome Cocktail	

Thursday 6 June
09:00-18:45

09:00-11:00	Session I	Chair: TBD
09:00-09:30	S. Guillot: Latest news and future prospects on measurements of neutron star masses and radii	
09:30-10:00	M. C. Baglio: The highs and lows of transitional millisecond pulsars	
10:00-10:15	D. Choudhury: A NICER View of the Nearest and Brightest Millisecond Pulsar: PSR J0437--4715	
10:15-10:30	D. Misra: Investigating the formation of cannibalistic millisecond pulsar binaries using detailed stellar evolution	
10:30-10:45	A. Papitto: Spying on the quickly variable optical sky: the enigmatic case of millisecond pulsars	
10:45-11:00	G. Illiano: Snooping around transitional millisecond pulsars: can accretion- and rotation-powered states co-exist?	
11:00-11:30	Coffee break	
11:30-13:30	Session II	Chair: TBD
11:30-11:45	C. Pallanca: Optical companions to binary MSPs in globular clusters	
11:45-12:00	J. Simpson: The power of the dark side: hunting spiders to find the most massive neutron stars	
12:00-12:15	H. An: Orbitally modulating gamma-ray signals in redback pulsar binaries: insights into particle acceleration in the winds of millisecond pulsars	
12:15-12:30	C. Ballocco: The first simultaneous Xray/UV timing study of the accreting millisecond pulsar SAX J1808.4-3658	
12:30-13:00	C. Heinke: Neutron star cooling	
13:00-13:30	S. Lander: The fascinating magnetic-field evolution of neutron stars: many questions, a few answers	
13:30-15:00	Lunch	
15:00-16:30	Session III	Chair: TBD
15:00-15:15	A. Marino: Constraints on the dense matter equation of state from young and cold isolated neutron stars	
15:15-15:30	C. Dehman: Understanding the dynamics of neutron star magnetic field through 3D magneto-thermal simulations	
15:30-15:45	A. Igoshev: Low-B magnetars are produced as a result of Tayler-Spruit dynamo at proto-NS stage	
15:45-16:00	D. De Grandis: Modelling magnetar outburst with magneto-thermal simulation	
16:00-16:30	Poster session	
16:30-17:00	Coffee break	
17:00-18:45	Session IV	Chair: TBD
17:00-17:15	M. Del Santo: The puzzling X-ray binary MAXI J1810-222	
17:15-17:30	F. La Monaca: Highly Significant Detection of X-Ray Polarization from the Brightest Accreting Neutron Star Sco X-1	
17:30-17:45	C. Diez: Unveiling stellar wind structures in high-mass X-ray binaries: A high-resolution study of Vela X-1 with XMM-Newton	
17:45-18:00	M. Rigoselli: XMM-Newton observations of the peculiar Be X-ray binary A0538-66	
18:00-18:15	E. Sokolova-Lapa: Magnetic fields of neutron stars in Be X-ray binaries: what can we learn from modelling and observations in quiescence?	
18:15-18:30	C. Ferrigno: Pulse profile diagnostics in magnetized neutron-star X-ray binaries	
18:30-18:45	E. Bozzo: Supergiant fast X-ray transients	

Friday 7 June
09:00-16:45

09:00-11:00	Session I	Chair: TBD
09:00-09:30	V. Graber: <i>Neutron-star population synthesis: an overview and new results</i>	
09:30-10:00	M. Camisassa: <i>White dwarf stars in the big data era</i>	
10:00-10:15	G. A. Rodríguez Castillo: <i>EXTraS-ordinary Discoveries: Unveiling 60 New Pulsating X-ray Sources with XMM-Newton</i>	
10:15-10:30	C. Maitra: <i>The population of X-ray binaries in the Magellanic system detected during the eROSITA all-sky survey</i>	
10:30-10:45	A. Z. Ansar Mohideen: <i>Shedding light on quiescent X-ray Binaries through population studies with eROSITA</i>	
10:45-11:00	T. Cunningham: <i>New Accreting White Dwarfs Determined from X-ray Observations</i>	
11:00-11:30	Coffee break	
11:30-13:15	Session II	Chair: TBD
11:30-12:00	I. Pelisoli: <i>Pulsars and propellers: X-ray and radio emission from the most mysterious white dwarf binaries</i>	
12:00-12:30	I. Caiazzo: <i>Magnetic White Dwarfs in X-rays</i>	
12:30-13:00	J. Jordi: <i>Recent Advances in the Modeling of Type I X-Ray Bursts and Nova Outbursts</i>	
13:00-13:15	M. Orío: <i>The meaning of quasi-simultaneous X-rays and gamma-rays observations of RS Oph in outburst</i>	
13:15-14:45	Lunch	
14:45-16:30	Session III	Chair: TBD
14:45-15:00	E. Kuulkers: <i>The crucial discovery of thermonuclear X-ray bursts: never throw away old data!</i>	
15:00-15:15	T. Russell: <i>Thermonuclear explosions on neutron stars reveal the speed of their jets</i>	
15:15-15:30	A. Knight: <i>Type-I X-ray Bursts in the X-ray Eclipses of EXO 0748-676</i>	
15:30-15:45	Y. Herrera: <i>Mass-loss and composition of wind ejecta in type I X-ray bursts</i>	
15:45-16:00	G. Sala: <i>Old novae in the eROSITA survey</i>	
16:00-16:15	T. Korpakís: <i>Connecting recurrent novae with the lowest mass accretion rate neutron stars</i>	
16:15-16:45	Concluding remarks	

