



**Cefalù, 27-30 Settembre 2022**

# **PROGRAM**

## Martedì 27 Settembre

8:45-9:00		Saluti istituzionali e comunicazioni LOC
<b>Chair Del Santo</b>		
9:00-9:25	Malzac	Models for black hole X-ray binaries
9:25-9:40	Carotenuto	Decelerating jets from black hole X-ray binaries
9:40-9:55	Egron	Composition of the jet in the microquasar Cygnus X-1
9:55-10:10	Lai	The stellar wind in Cygnus X-1: an X-ray spectral-timing view
10:10-10:25	Parra	The current state of disk wind observations in galactic Black Hole LMXBs through X-ray absorption lines
10:25-10:40	Mastroserio	Modelling X-ray time lags in stellar mass black holes
<b>10:40-11:10 Coffee break</b>		
11:10-11:25	Ulgiate	Timing analysis of Black Hole Transient Swift J1753.5-0127
11:25-11:40	Casella	Constraining Jet Properties in the Black-Hole Transient MAXI J1820+070 through Fast Multi-Wavelength Variability
<b>Chair D'Ai</b>		
11:40-12:05	Marino	Accretion and ejection in Neutron Star Low Mass X-ray Binaries
12:05-12:20	Vincentelli	A shared disk-jet accretion instability for black holes and neutron stars
12:20-12:35	Munoz-Darias	Accretion disc winds from low-mass X-ray binaries
12:35-12:50	Anitra	A thick forest of emission lines in the soft x-ray spectrum of LMXB Scorpius X-1
12:50-13:05	Piga	A census of mathematical models of Quasi Periodic Oscillations
13:05-13:20	De Falco	Exploring metric departures from Schwarzschild black hole geometry
<b>13:20-16:00 Lunch break</b>		

<b>Chair Di Salvo</b>		
16:00-16:25	Ambrosino	Millisecond pulsars in the ultra-fast optical domain
16:25-16:40	Papitto	Spying on the quickly variable optical sky: millisecond pulsars and more
16:40-16:55	Miraval Zanon	UV/optical pulsed emission from accretion and rotation-powered millisecond pulsars
16:55-17:10	Baglio	Highs and lows of a transitional millisecond pulsar - the ultimate campaign on PSR J1023+0038
17:10-17:25	Illiano	Time lags between optical and X-ray pulsations of the transitional millisecond pulsar PSR J1023+0038
<b>17:25-17:55 Coffee break</b>		
<b>Chair Feroci</b>		
17:55-18:20	Sanna	Hermes
18:20-18:35	Bernardini	Time-domain Astronomy with SVOM
18:35-18:50	Cappi	CTAO and CTA+ new opportunities for the CNOC community
18:50-19:05	Campana	SOXS@NTT: the transient hunter
19:05-19:20	Adamo	Il parossismo dell'informazione sui buchi neri

## Mercoledì 28 Settembre

<b>Chair Cusumano</b>		
9:00-9:25	Ducci	High-mass X-ray binaries with neutron stars
9:25-9:40	Campanelli	Reliability study of the CATS@BAR live project: follow-up observations of a sample of new X-ray pulsators
9:40-9:55	Ambrosi	Disk precession to explain the super-orbital modulation of LMC X-4: results from the Swift monitoring campaign
9:55-10:10	La Palombara	A deep XMM-Newton observation of the X-Persei-like binary system CXOU J225355.1+624336
10:10-10:25	Bozzo	Supergiant Fast X-ray Transients and other wind accretors: where do we stand and recent results
10:25-10:40	Sidoli	Sitting on the lowest X-ray luminosity state in a Supergiant Fast X-ray Transient
<b>10:40-11:10 Coffee break</b>		
<b>Chair Mereghetti</b>		
11:10-11:35	Bachetti	Ultraluminous X-ray sources: broadband and timing properties
11:35-12:00	Pinto	Extreme accretion and feedback in ultraluminous X-ray sources
12:00-12:15	Robba	Spectral-timing studies of ultraluminous X-ray sources
12:15-12:30	Barra	Sulla natura della sorgente ultraluminosa NGC 55 ULX-1
12:30-12:45	Pintore	The highly variable story of the Ultraluminous X-ray source NGC 4559 X7
12:45-13:00	El Byad	Studying the aperiodic X-ray variability in the M82 Galaxy
13:00-13:15	Imbrogno	The case of pulsating ULX M51 X-7: a QPO to find them all?
13:15-13:30	Amato R.	The ULX M81 X-6: clues of a precessing disc around a weakly magnetised neutron star
<b>13:30-16:00 Lunch break</b>		

16:00-16:15	Nicastro	A Powerful Time-Evolving Photo-Ionization Device for UV and X-ray Spectral Modeling of Ionised Outflows
16:15-16:40	De Rosa	Accretion in strong field gravity with the enhanced X-ray Timing and Polarimetry mission - eXTP
<b>Chair de Martino</b>		
16:40-17:05	Scaringi	What's so great about accreting white dwarfs? A brief (and biased!) review.
17:05-17:20	Giroletti	Filming the evolution of symbiotic novae with VLBI: the 2021 explosion of RS Oph
<b>17:20-17:50 Coffee break</b>		
17:50-18:15	Caiazzo	From Gaia to LISA, the new landscape of white dwarf studies
18:15-18:30	Silvotti	SdBs binaries and CV connection
18:30-18:45	Pallanca	The discovery of slow cooling White Dwarfs
18:45-19:00	Fratta	Identification and classification of H $\alpha$ -excess candidates in the Northern Galactic Plane.
19:00-19:15	Pincirolì Vago	Artificial Intelligence in Astrophysics
<b>20:30 Social dinner</b>		

## Giovedì 29 Settembre

<b>Chair Turolla</b>		
9:00-9:25	Mancini Pires	Isolated neutron stars with eROSITA
9:25-9:40	Ascenzi	A new finite-volume code for the thermal evolution of magnetized neutron stars in 3 dimensions
9:40-9:55	Rigoselli	X-ray emission from isolated neutron stars: latest results from XMM-Newton and NICER data
9:55-10:20	Rea	Magnetars and the transient multi-band sky
10:20-10:35	Coti Zelati	Recent outburst activities within the magnetar class
<b>10:35-11:05 Coffee break</b>		
11:05-11:20	Borghese	Latest outbursts from radio magnetars
11:20-11:35	De Grandis	Modelling Magnetar Behaviour with 3D Magneto-Thermal Simulations
11:35-11:50	Israel	The EWOCS's gaze at the compact object population in Westerlund 1
<b>Chair Zane</b>		
11:50-12:15	Possenti	The FRBs' saga: mysteries, suspects and culprits
12:15-12:30	La Placa	Un nuovo modello unificato per i Fast Radio Burst
12:30-12:45	Trudu	A multi-wavelength campaign on FRB 20180916B to unravel the nature of Fast Radio Bursts
12:45-13:00	Zampieri	Fast-photometry observing campaigns of Fast Radio Bursts and magnetars with Aqueye+ and IFI+lqueye
<b>13:00-16:00 Lunch break</b>		

<b>Chair Burderi</b>		
16:00-16:15	Burgay	Searching for pulsar in unidentified gamma-ray sources with MeerKAT
16:15-16:30	Del Zanna	Relativistic dynamo and magnetic field amplification in compact objects
16:30-16:45	Ridolfi	The role of MeerKAT in the current renaissance of globular cluster pulsars
16:45-17:00	Ronchi	Long-period pulsars as possible outcomes of supernova fallback accretion
<b>Chair Bocchino</b>		
17:00-17:25	Amato E.	Pulsar Wind Nebulae: a review
<b>17:25-17:55 Coffee break</b>		
17:55-18:10	Olmi	Particle escape from evolved pulsars and their nebulae
18:10-18:35	Orlando	Supernova Remnants: a storytelling about life, death and afterlife of massive stars
18.35-18:50	Greco	Evidences for a Pulsar Wind Nebula in SN1987A
18:50-19:15	Giuliani	The ASTRI Mini-Array : status and perspectives
19:15-19:30	Cardillo	Very High Energy Astrophysics and the search of the lost Pevatrons
19:30-19:45	Crestan	Multiwavelength investigation of LHAASO J1908+0621: an unidentified galactic PeVatron

## Venerdì 30 Settembre

<b>Chair Stella</b>		
8:45-9:10	Branchesi	Perspectives of multi-messenger astrophysics in the Einstein Telescope era
9:10-9:35	Dall'Osso	Compact objects as sources of continuous gravitational waves: highlights, news & challenges
9:35-9:50	Colombo	Multi-messenger observations of binary neutron star mergers in the O4 run
9:50-10:05	Pavan	Jet structure modelling with self-consistent binary neutron star merger environments.
10:05-10:20	Perrodin	The EPTA approach to the search for ultra-long period GWs
10:20-10:35	Ragosta	The multi-messenger paradigm in the Vera Rubin Observatory's LSST era
<b>Chair Campana</b>		
10:35-11:00	Rankin	X-ray Polarimetry with the IXPE observatory
<b>10:00-11:20 Coffee break</b>		
11:20-11:45	Taverna	Polarized X-rays from the magnetar 4U 0142+61
11:45-12:00	Gnarini	Modelling Polarization Properties of NS-LMXBs
12:00-12:15	Capitanio	The first IXPE observation of a weakly magnetized neutron star X-ray binary GS 1826-238
12:15-12:30	Farinelli	The first detection of polarization in the neutron star low mass X-ray binary Cyg X-2
12:30-12:45	Bucciantini	A Polarized View of Relativistic Accelerators: PWNe and PSRs with IXPE.
12:45-13:00	Ferrazzoli	IXPE observations of supernova remnants: first results
13:00-13:15	Mikusincova	X-ray polarimetry as a tool to measure the black hole spin in microquasars: simulations of IXPE capabilities
<b>13:15-13:30</b>	<b>Stella</b>	<b>Conclusioni</b>