



## Conference Program

### **Tuesday 22 October**

08:30 – 09:00: *Registration*

#### **Opening**

Chair: Steven Tingay

09:00 – 09:10: Welcome from the INAF – Arcetri Astrophysical Observatory Director  
Sofia Randich

09:10 – 09:20: Comments from the INAF President  
Nicolò D’Amico

09:20 – 09:30: Comments from the Australian Ambassador to Italy  
Greg French

#### **Current and future optical facilities in the multi-messenger era**

Chair: Grazia Umata

09:30 – 10:00: Next-generation optical facilities in the multi-messenger era: the SOXS case  
Sergio Campana (INAF-Brera)

10:00 – 10:30: MAVIS: sharper than JWST, deeper than HST  
Giovanni Cresci (INAF-Arcetri)

10:30 – 11:00: *Morning tea*

11:00 – 11:30: Neutral hydrogen in the distant Universe - New HI absorption results from  
ASKAP  
Elaine Sadler (CSIRO / University of Sydney)

11:30 – 12:00: The SkyHopper Space Telescope CubeSat  
Michele Trenti (University of Melbourne)

#### **Multi-wavelength and transient astronomy**

Chair: Elaine Sadler

12:00 – 12:30: Optical surveys in the multi-messenger era  
Enrico Cappellaro (INAF-Padova)

12:30 – 13:30: *Lunch*

13:30 – 14:00: Fast Radio Bursts and their multiwavelength follow-ups  
Shivani Bhandari (CSIRO)



- 14:00 – 14:30: The host galaxies of Fast Radio Bursts with ASKAP and the VLT  
Stuart Ryder (Macquarie University)
- 14:30 – 17:00: *Tour of Ximeniano Museum and Biblioteca Medicea Laurenziana*  
*Conference photo*

### **Wednesday 23 October**

#### **The role of current and future radio telescopes in the multi-messenger era**

Chair: Viviana Fafone

- 09:00 – 09:30: The role of current and future Italian radio telescopes  
Federica Govoni (INAF-Cagliari)
- 09:30 – 10:00: Technology for radio astronomy  
Tasso Tzioumis (CSIRO)
- 10:00 – 10:30: Gas and dust in the host galaxies of Gamma-Ray Bursts  
Leslie Hunt (INAF-Arcetri)
- 10:30 – 11:00: *Morning tea*
- 11:00 – 11:30: The role of current and future radio telescopes in the multi-messenger era  
Melanie Johnston-Hollitt (Curtin University)
- 11:30 – 12:00: A first glimpse of the Galactic Plane with ASKAP  
Grazia Umana (INAF-Catania)
- 12:00 – 12:20: Untangling the Magnetic Field of the Giant Radio Galaxy ESO422-G028  
with Australian SKA Precursors  
Christopher Riseley (University of Bologna)
- 12:20 – 12:40: Jets at the extremes: the GLEAM and LAT view of blazars  
Marcello Giroletti (INAF-IRA)
- 12:40 – 13:40: *Lunch*
- Chair: Eric Thrane
- 13:40 – 14:00: Digital beamforming with the cryogenic C-band PHAROS2 PAF  
Alessandro Navarrini (INAF-Cagliari)
- 14:00 – 14:20: Combining large radio continuum surveys with multi-wavelength data to  
extract the science  
Ray Norris (WSU / CSIRO)
- 14:20 – 14:40: Multi-frequency polarimetry of complete samples of extragalactic radio  
sources  
Vincenzo Galluzzi (INAF-Trieste)



- 14:40 – 15:10: *Afternoon tea*
- 15:10 – 15:30: Assessing the RQ AGN population: results from observations of the G23 field with ASKAP and ATCA  
Isabella Prandoni (INAF-IRA)
- 15:30 – 15:50: UAV-based Antenna Measurements for the Bridging Project of SKA1-low  
Fabio Paonessa (CNR-IEIIT)
- 15:50 – 16:10: The Northern Cross Fast Radio Burst project  
Gianni Bernardi (INAF-IRA)

**Gravitational wave detectors and prospects for coordination with electro-magnetic astronomy**

Chair: Pietro Bolli

- 16:10 – 16:40: Looking for low frequency GWs with the Pulsar Timing Arrays  
Andrea Possenti (INAF-Cagliari)
- 19:30: *Conference dinner*

**Thursday 24 October**

**Gravitational wave detectors and prospects for coordination with electro-magnetic astronomy  
(continuation)**

Chair: Marica Branchesi

- 09:00 – 09:30: Gravitational wave detectors: prospects for the future  
Viviana Fafone (University of Rome Tor Vergata / INFN)
- 09:30 – 10:00: The population properties of gravitational waves in the transient catalog  
Eric Thrane (Monash University)
- 10:00 – 10:30: GW signal from transient astronomical events  
Martina Toscani (University of Milan)
- 10:30 – 11:00: *Morning tea*

**The history of astronomy between Australia and Italy, motivated by the career of Pietro Baracchi**

Chair: Melanie Johnston-Hollitt

- 11:00 – 11:30: Baracchi and the Great Melbourne Telescope  
Phil Edwards (CSIRO)



### **The role of astroparticle experiments in the future**

Chair: Gemma Anderson

- 11:30 – 12:00: Neutrino telescopes in the Mediterranean sea for multimessenger astrophysics  
Maurizio Spurio (University of Bologna / INFN)
- 12:00 – 12:30: Multimessenger astroparticle physics for testing theories of dark matter and new particles  
Pat Scott (ICL)
- 12:30 – 13:30: *Lunch*

### **High photon energy astrophysics in the multi-messenger era**

Chair: Filippo Maria Zerbi

- 13:30 – 14:00: Cosmic Ray physics in the CTA era  
Elena Amato (INAF-Arcetri)
- 14:00 – 14:30: Connecting radio waves and gamma-rays in extreme astronomical settings  
Gavin Rowell (University of Adelaide)
- 14:30 – 15:00: The ASTRI mini-array in the context of gamma-ray astronomy  
Giovanni Pareschi (INAF-Brera)
- 15:00 – 15:30: Rapid-response radio follow-up of high-energy astrophysical events  
Gemma Anderson (Curtin University)
- 15:30 – 16:00: *Afternoon tea*
- 16:00 – 16:30: Nano-satellites for high energy astrophysics and fundamental physics  
Fabrizio Fiore (INAF-Trieste)
- 16:30 – 17:00: The Transient High-Energy Sky and Early Universe Surveyor (THESEUS)  
Lorenzo Amati (INAF-Bologna)

### **Closing**

Chairs: Gavin Rowell and Tiziana Venturi

- 17:00 – 17:20: Workshop summary