

The era of collaborative multi-wavelength and multi-messenger astronomy: science and technology



THE 2ND
**PIETRO
BARACCHI**
CONFERENCE

Tuesday, 22 October 2019 - Thursday, 24 October 2019

Auditorium della Fondazione Cassa di Risparmio di Firenze (Italy)

Scientific Programme

Examples of topics covered at the meeting are (recognising that each topic will include science and technology development components):

- Next-generation optical facilities in the multi-messenger era. Australia has established a strategic relationship with ESO and Italy is a major ESO partner
- The role of current and future radio telescopes in the multi-messenger era (e.g. SRT, VLBI, MWA, ASKAP, SKA, LOFAR). Italy and Australia are both Members of the SKA project
- Gravitational wave detectors and prospects for coordination with electro-magnetic astronomy. Italy leads the VIRGO project, hosts the European Gravitational Observatory (EGO), and is deeply involved in the third generation of GW detectors, such as the Einstein Telescope (ET). Australia is involved in interferometric and pulsar timing GW techniques (OzGRAV)
- High photon energy astrophysics in the multi-messenger era. Italy is the HQ for the CTA and Australian institutes are Members
- The role of astroparticle experiments in the future. Italy is a major partner in KM3Net and Australian institutes are joining KM3Net
- Multi-wavelength and transient astronomy
- The history of astronomy between Australia and Italy, motivated by the career of Pietro Baracchi