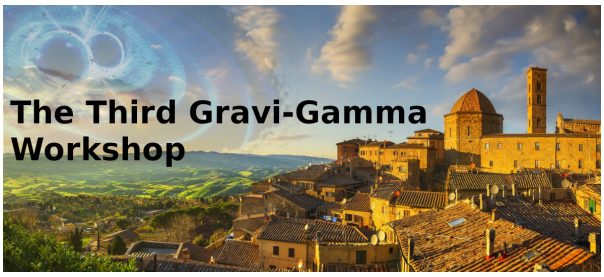

Contribution ID: **6** Type: **Invited talk**

New Robotic Telescope in the context of EM Detectors and future prospects for Multimessenger science

Friday, 7 October 2022 15:00 (30 minutes)

The discovery of gravitational waves (GWs) from the coalescence of compact objects is one of the most exciting scientific discoveries of the last decade, and started a “golden age”for the multi-messenger astronomy. Merging of either black hole-neutron star or two neutron stars are among the most promising GW sources able to generate electromagnetic counterparts, but also core-collapsing massive stars and isolated neutron stars could be detected in the near future. Several electromagnetic counterparts, such as gamma-ray bursts and their afterglows, kilonovae, millisecond pulsars, soft gamma repeaters and core-collapse supernovae, are expected to be associated with these sources. Comprehensive follow-up observational campaigns of GW signals will help to answer to some fundamental questions in astrophysics and physics in general, leading to a more complete understanding of these events. I will review the current status of the observations of GW sources and their EM counterparts and the future perspectives for joint multi-messenger observational campaigns with current and future instrumentation.

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Session Classification: Electromagnetic detectors and future prospects for multimessenger science and contributed talks