Seventeenth Marcel Grossmann Meeting



Contribution ID: 464

Type: Invited talk in a parallel session

Neutrino counterpart of kHz GW sources

Thursday, 11 July 2024 17:22 (22 minutes)

Multimessenger astrophysics provides unique and valuable insights into the properties and processes of the physical universe. The recent discovery of gravitational waves and high energy cosmic neutrinos, marked the beginning of a new era of the multimessenger astronomy. These new messengers, along with electromagnetic radiation and cosmic rays, give new insights into the most extreme energetic cosmic events. Among them supernovae explosion is one of the challenging targets of this new astronomical approach. We developed a machine learning algorithm to further improve the detectability of such type of source. Prospects for a third generation gravitational wave detector will be presented.

Primary authors: Mr VEUTRO, Alessandro (Universita' di Roma La Sapienza, I-00185 Roma, Italy); Prof. RICCI, Fulvio (Universita' di Roma La Sapienza, I-00185 Roma, Italy); DI PALMA, IRENE (INFN AND SAPIENZA UNIVERSITY OF ROME); Prof. DRAGO, Marco (Universita' di Roma La Sapienza, I-00185 Roma, Italy); Ms LOPEZ, Melissa (Institute for Gravitational and Subatomic Physics (GRASP), Department of Physics); Prof. CERDA-DU-RAN, Pablo (Departamento de Astronomia y Astrofisica, Universitat de Valencia,)

Presenter: DI PALMA, IRENE (INFN AND SAPIENZA UNIVERSITY OF ROME) **Session Classification:** Gravitational kHz waves - LIGO-Virgo-KAGRA

Track Classification: Gravitational Waves (GW): Gravitational kHz waves - LIGO-Virgo-KAGRA