



Poster session 1 – Monday 4 July

P1.001 High-Energy Neutrino follow-up of first gravitational wave event GW 150914

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on behalf of ANTARES, IceCube and LIGO/Virgo collaborations

On September 14th 2015, LIGO/Virgo collaboration has detected the first significant gravitational wave event. Consequently, a neutrino follow up was performed using both ANTARES and IceCube online data to search for a potential neutrino counterpart to this event. No neutrino candidate in both temporal and spatial coincidence with GW 150914 had been detected within +/- 500 s from the event. This non-detection was used to constrain the neutrino fluence and the total energy emitted in neutrinos for a standard E-2 source spectrum as well as a spectral cutoff at 100 TeV. This first joint study does demonstrate the multimessenger synergies between ANTARES, IceCube and LIGO/Virgo. A coincident gravitational wave and neutrino detection would open a new era on multimessenger astrophysics.