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Possible extragalactic astrophysical counterparts of IceCube neutrino events.

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**Abstract content (Max 300 words)
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Sources of the 35 very high-energy (VHE) neutrinos detected by IceCube Neutrino Observatory is now an open question in astronomy and astrophysics. The dominated shower-type neutrino events have large errors in measuring their directions, hence it is difficult to identify their astrophysical sources. These neutrinos can have counterparts in non-thermal X-rays and gamma rays. So a cross-correlation study of IceCube neutrino events with extragalactic candidate sources using X-ray and gamma-ray selected source catalogues such as Swift-BAT, 3LAC and TeV-Cat, will help in identifying sources of the neutrino events. In order to search for the most possible candidates we apply cuts on X-ray and gamma-ray fluxes of the sources in those catalogues, and then we study the statistical significance of correlation by using invariant statistics and Monte Carlo simulations for different classes of sources. Furthermore we study the physical scenario in which VHE neutrinos can be produced in those correlated sources.

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Primary author: Dr MOHARANA, Reetanjali (UJ)

Co-authors: Dr BRITTO, Richard (uj); Prof. RAZZAQUE, Soebur (University of Johannesburg)

Presenter: Dr MOHARANA, Reetanjali (UJ)

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