

## Neutrino messenger approach for studying gamma-ray bursts and sources of ultra-high energy cosmic rays

*Wednesday, 24 April 2013 10:50 (30 minutes)*

High-energy (TeV-PeV) neutrinos are predicted to be produced by cosmic ray particles in gamma-ray bursts, so they are key probes of the dissipation mechanism and jet composition of GRBs. I will talk about recent progresses of the IceCube observations on GRB neutrinos and the theoretical implication. I will also talk about the ultra-high energy (EeV) neutrino emission produced by ultra-high energy cosmic rays interacting with cosmic background photons and its implication for studying the sources of ultra-high energy cosmic rays.

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