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Multimessenger astrophysics with neutrinos and gamma rays in the coming decade 1 MARCOS SANTANDER, University of Alabama

The study of the gamma-ray sky has revealed a large population of extreme astrophysical objects capable of emitting electromagnetic radiation up to the highest observable energies, in the PeV range. The discovery of TeV-PeV astrophysical neutrinos by IceCube provides a complementary view of the high-energy sky that, in combination with gamma-ray observations, can address many pressing questions in astrophysics. Some of these include the origin of cosmic rays, the nature of transient sources, and the properties of extreme astrophysical environments. In this talk I will present a summary of recent results is neutrino and gamma-ray astrophysics and discuss what new advances may be enabled by next-generation observatories over the coming decade.

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