Multi-messenger searches via IceCube's high-energy neutrinos and gravitational-wave detections of LIGO/Virgo

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Detecting astrophysical events through multiple messengers improves our understanding of underlying sources. In addition to probing different physics, multi-messenger observations can provide improved localization in low latency, guiding astronomers who perform follow-up observations. We will present the real-time and offline searches for high-energy neutrinos associated with gravitational-wave events via IceCube's neutrinos and LIGO/Virgo's public announcements and detections.

Keywords

Gravitational-waves; high-energy neutrinos; multi-messenger astronomy

Collaboration

IceCube

other Collaboration

Subcategory

Experimental Results

Primary author: VESKE, Doğa (Columbia University)

Co-authors: HUSSAIN, Raamis (University of Wisconsin-Madison); Prof. MÁRKA, Zsuzsanna (Columbia University); COUNTRYMAN, Stefan (Columbia University); PIZZUTO, Alex (University of Wisconsin-Madison); ASALI, Yasmeen (Yale University); SILVA OLIVEIRA, Ana (Columbia University); Prof. BARTOS, Imre; VANDEN-BROUCKE, Justin (University of Wisconsin-Madison); Prof. MÁRKA, Szabolcs (Columbia University); FOR THE ICECUBE COLLABORATION

Presenter: VESKE, Doğa (Columbia University)

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