

The Baikal-GVD telescope follow-up analysis of the IceCube neutrino alerts

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The Baikal Gigaton Volume Detector is a neutrino telescope currently under construction in Lake Baikal. The main goal of Baikal-GVD is to detect high-energy cosmic neutrinos using both track-like and cascade-like events. Baikal-GVD has been following the IceCube telescope neutrino alerts since September 2020. The prompt real-time response (the delay is ~ 3 min) to these alerts is complemented with offline search for coincidences in the time windows of ± 1 h and ± 12 h. If a coincidence is found, the potential signal is compared with the expected background and upper limits on the neutrino fluence are calculated.

Primary authors: Dr AVRORIN, Alexander (Joint Institute for Nuclear Research); Dr SHAIBONOV, Bair (Joint Institute for Nuclear Research); Dr SUVOROVA, Olga (Joint Institute for Nuclear Research); DIK, Viktoriya (Joint Institute for Nuclear Research); Dr DZHILKIBAEV, Zhan-Arys (Joint Institute for Nuclear Research)

Presenter: DIK, Viktoriya (Joint Institute for Nuclear Research)

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