

Neutrino Telescope in Lake Baikal: Present and Nearest Future

Monday, July 12, 2021 4:30 PM (30 minutes)

The progress in the construction and operation of the Baikal Gigaton Volume Detector in Lake Baikal is reported. The detector is designed for search for high energy neutrinos whose sources are not yet reliably identified. It currently includes over 2000 optical modules arranged on 56 strings, providing an effective volume of 0.35 km³ for cascades with energy above 100 TeV. We review the scientific case for Baikal-GVD, the construction plan, and first results from the partially built experiment which is currently the largest neutrino telescope in the Northern Hemisphere and still growing up.

Keywords

astrophysics; cherenkov telescope

Collaboration

other (fill field below)

other Collaboration

Baikal-GVD

Subcategory

Experimental Methods & Instrumentation

Primary authors: DZHILKIBAEV, Zhan-Arys (Institute for nuclear research Moscow); FOR BAIKAL-GVD COLLABORATION

Presenter: DZHILKIBAEV, Zhan-Arys (Institute for nuclear research Moscow)

Session Classification: Plenary

Track Classification: Scientific Field: NU | Neutrinos & Muons