

Positioning system for Baikal-GVD

Tuesday, July 13, 2021 1:18 PM (12 minutes)

Baikal-GVD is a kilometre scale neutrino telescope currently under construction in Lake Baikal. Due to water currents in Lake Baikal, individual photomultiplier housings are mobile and can drift away from their initial position. In order to accurately determine the coordinates of the photomultipliers, the telescope is equipped with an acoustic positioning system. The system consists of a network of acoustic modems, installed along the telescope strings and uses acoustic trilateration to determine the coordinates of individual modems. This contribution discusses the current state of the positioning in Baikal-GVD, including the recent upgrade to the acoustic modem polling algorithm.

Keywords

neutrino telescopes; acoustic positioning;

Collaboration

other (fill field below)

other Collaboration

Baikal-GVD

Subcategory

Experimental Methods & Instrumentation

Primary author: Mr AVRORIN, Alexander (INR RAS)

Presenter: Mr AVRORIN, Alexander (INR RAS)

Session Classification: Discussion

Track Classification: Scientific Field: NU | Neutrinos & Muons