

Cherenkov water detector NEVOD as a facility for calibration of various OMs

NEVOD is the first in the world Cherenkov water detector (CWD) at the Earth's surface equipped with a spatial lattice of quasi-spherical measuring modules for the investigations of all basic components of cosmic rays including neutrinos. A large dynamic diapason and close location of quasispherical modules allows use this detector as a Cherenkov water calorimeter for cascade shower investigations and measurements of the energy deposit of muon bundles. On the top and the bottom of the water reservoir, the calibration telescope system (CTS) consisting of scintillation counters (40 ones, on the top and 40 on the bottom) are placed. Around the water reservoir, the coordinate-tracking detector DECOR consisting of modules of streamer tubes is placed. CTS and DECOR allow calibrate measuring modules by Cherenkov light from muons with known trajectories. This possibility for calibration of new optical modules of IceCube, KM3Net and GVD in the CWD NEVOD is considered.

Primary author: PETRUKHIN, Anatoly (MEPhI)

Presenter: PETRUKHIN, Anatoly (MEPhI)