

The Baikal Neutrino Project: Present and Perspective

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The Neutrino Telescope NT200 is operated since 1998 and was upgraded to the 10 Mton detector NT200+ in 2005. The preparation towards a development of a km³-scale detector in Lake Baikal is currently a central activity point. As an important milestone a km³-prototype Cherenkov string, based on completely new technology, has been installed in 2008 and was successfully operating together with NT200+ since April 2008. It was upgraded in April 2009. Also, we review the status of high-energy acoustic neutrino detection activities in Lake Baikal. The Baikal collaboration designed a hydro-acoustic string which may be regarded as a prototype subunit for a future neutrino acoustic array. We present selected physics results from the long-term operation of NT200, the results of background studies for acoustic detection of UHE neutrinos, as well as the results of associated science activities.

Primary author: BUDNEV, Nikolai (Irkutsk State University, Irkutsk, Russia)

Presenter: BUDNEV, Nikolai (Irkutsk State University, Irkutsk, Russia)

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