

# Development of calibration system for a project of a new Baksan Large Neutrino Telescope

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We present results of the development of a calibration system for a project of a new Baksan Large Neutrino Telescope. The calibration system is based on fast blue and UV InGaN and AlGaIn ultra bright and high power light emitting diodes (LEDs), a diffusing ball and fiber optics. Special fast electronic drivers for such LEDs were developed. The drivers are based on fast complementary and avalanche transistors. The diffusing ball is designed to provide uniform isotropic illumination of all photomultipliers of the detector. Thorough studies of timing and light yield parameters are done. Special emphasis is done on careful studies of compatibility of calibration system parts with liquid scintillator and ultra pure water.

## Keywords

Neutrino detector; scintillation detector; calibration system; LEDs

## Collaboration

## other Collaboration

## Subcategory

Experimental Methods & Instrumentation

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