

The TAIGA observatory - a hybrid detector array for gamma-ray astronomy and cosmic ray physics in the Tunka valley

The TAIGA observatory addresses ground-based gamma-ray astronomy at energies from a few TeV to several PeV, as well as cosmic ray physics from 100 TeV to several EeV. TAIGA will be located in the Tunka valley, ~50 km West from Lake Baikal. The different detectors of the TAIGA will be grouped in 6 arrays to measure Cherenkov and radio emission as well as electron and muon components of atmospheric showers. The combination of the wide angle Cherenkov detectors of the TAIGA-HiSCORE array and the 4-m Imaging Atmospheric Cherenkov Telescopes of the TAIGA-IACT array with their FoV of 10x10 degrees offers a very cost effective way to construct a 10 km² array for gamma-ray astronomy.

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