The 6th international conference on particle physics and astrophysics



Contribution ID : 315

Type : Poster

The Tunka-Grande array simulations for the primary cosmic rays identification – status and prospects

Tuesday, 29 November 2022 17:10 (120)

The Tunka-Grande scintillation array is a part of the TAIGA experimental complex, located in the Tunka Valley (Buryatia Republic, Russia). The array is intended to study the energy spectrum and the mass composition of charged cosmic rays and search for diffuse gamma rays above 10 PeV by detecting charged components of extensive air showers. This report describes the current state of the array simulations based on the CORSIKA and Geant4 toolkits, as well as some of the results obtained from the simulations. We also present future prospects for the Tunka-Grande simulations in the context of measurement of the primary mass composition in the 10 - 1000 PeV energy range.

Primary author(s) : TERNOVOY, Mark (API ISU)Co-author(s) : TAIGA COLLABORATIONPresenter(s) : TERNOVOY, Mark (API ISU)Session Classification : Poster Session

Track Classification : Facilities and advanced detector technologies