

Cosmic muons measurements in DANSS experiment

Wednesday, 24 October 2018 18:00 (15)

DANSS is a highly segmented detector, which contains 2500 one meter long plastic scintillator strips. The DANSS detector is placed under industrial reactor of the Kalinin Nuclear Power Plant. The distance to the core is varied on-line from 10.7m to 12.7m, and the primal task of experiment is a search for short-distance neutrino oscillations. This work contains results of the cosmic muons research based on the data received from DANSS. In order to achieve these results, the specific algorithm with 97 % efficiency of the muon events selection and track reconstruction was developed. We also present the preliminary results on the annual variability in the flux of cosmic muons and an evaluation of the $\text{Ethrcos}\theta$ parameter.

Primary author(s) : Mr. SAMIGULLIN, Eduard (ITEP)

Presenter(s) : Mr. SAMIGULLIN, Eduard (ITEP)

Session Classification : Particle Physics: Astroparticle physics

Track Classification : Particle physics: astroparticle physics