Geometric alignment of the SND detector

Tuesday 17 May 2016 09:20 (20 minutes)

We present the design, implementation and validation of the software procedure used to perform geometric calibration of the electromagnetic calorimeter with respect to the tracking system of the Spherical Neutral Detector (BINP, Novosibirsk). This procedure is based on the mathematical model describing the relative calorimeter position by means of a set of parameters. The parameter values are determined by minimizing a χ^2 function using the difference between directions reconstructed in these two subdetectors for $e^+e^- - > e^+e^-$ data events.

Author: MELNIKOVA, Natalya (Budker Institute of Nuclear Physics (RU))Presenter: MELNIKOVA, Natalya (Budker Institute of Nuclear Physics (RU))Session Classification: Experience with current calorimetric systems