Contribution ID : **711** Type : **Oral talk**

Calibration of NICA-MPD electromagnetic calorimeter modules with cosmic muons

Wednesday, 7 October 2020 11:15 (15)

The large barrel-shaped, shashlyk-type electromagnetic calorimeter (ECal) is an important part of the Multi-Purpose Detector (MPD) of the heavy-ion NICA experiment, and is designed to provide spatial and energy measurements for photons and electrons in the energy range from 40 MeV to 2-3 GeV. To deal with the high multiplicity, the ECal is finely segmented and made up of 38,400 cells ('towers') which are grouped into modules of 16 'towers' each. ECal projective geometry of the 'towers' oriented towards the beam interaction zone results in 8 different types of modules depending on their position in the ECal. As beam calibration of each individual 'tower' is time and resource expensive, we discuss our strategy of calibration for the ECal modules with cosmic muons and present some preliminary results.

Primary author(s) : BHATTACHARJEE, Maharnab (JINR)

Co-author(s) : TYAPKIN, Igor; DABROWSKA, Boyana; EGOROV, D.; SHUTOV, A.; TERLETSKIY, A.

Presenter(s) : BHATTACHARJEE, Maharnab (JINR)

Session Classification : Facilities and Advanced Detector Technologies

Track Classification : Facilities and advanced detector technologies