

COMMISSIONING OF FORWARD WALL DETECTOR IN THE HADES EXPERIMENT

The Forward Wall (FW) is subdetector of HADES (High Acceptance Di-Electron Spectrometer) experiment located in GSI/FAIR in Darmstadt, Germany. The HADES detector is a complex experimental apparatus designed for studying the QCD phase diagram at high baryonic densities and low temperatures, primarily via the di-lepton decay of vector mesons. FW is critical for determination of the collision centrality and event plane orientation in nucleus-nucleus collisions. FW setup consists of 288 cells of three different sizes and utilizes photomultiplier tubes (PMTs) with NE109 plastic scintillators. This talk will report the upgrade, repair, and calibration before the February/March 2024 experiment. Calibration was done using developed iterative algorithm, which allowed to calibrate all the cells of the detector at once. FW detector was firstly pre-calibrated using cosmic muons, the final calibration was done at C+C and Au+Au experiment.

Section

Heavy ion collisions at Intermediate and high energies

Primary author: KOHOUT, Pavel (JINR)

Co-authors: KOHOUTOVA, Alena; OPICHAL, Antonin (Palacky University Olomouc); KRUPA, Lubos

Presenter: KOHOUT, Pavel (JINR)

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