**DETERMINATION OF NEUTRAL PION PRODUCTION IN AG+AG COLLISIONS AT 1.23 A GEV BEAM ENERGY AT THE HADES EXPERIMENT**

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The High Acceptance DiElectron Spectrometer (HADES) is a fixed target experiment which explores the properties of hadronic matter in collisions of pions, protons and nuclei at beam energies 1-2 A GeV. It operates at the SIS18 accelerator in GSI, Darmstadt. Due to the newly built electromagnetic calorimeter ECal the HADES has a possibility to measure yield of the neutral pions via π0 → γγ decay. These measurements play an important role in reducing the systematic uncertainties in study of dilepton spectra.

The analized data were collected in Ag + Ag collisions at the beam energy 1.23 A GeV. The events with centrality 0-30 % were chosen for the analysis. The procedure of π0 yield determination and its uncertainty is discussed in this talk. This analysis includes calibration of the ECal detector, acceptance and efficiency corrections and extrapolation of the spectra.