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$\pi 0$ production in Ag+Ag collisions at 1.23 AGeV beam energy

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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 AGeV. It operates at the SIS18 accelerator in GSI, Darmstadt.

The precise measurements of neutral mesons yield were already carried out by TAPS collaboration. However, their measurements have only one bin in rapidity. Due to the newly built electromagnetic calorimeter ECal, the HADES experiment has the unique possibility to study the dependence of $\pi 0$ yield on rapidity (in the range 0.8-1.8) and transverse momentum (200-900 MeV/c).

In this talk the preliminary results of measurements of yield of π 0-mesons by the HADES experiment in collisions of Ag+Ag nuclei at beam energy 1.23 AGeV are discussed.

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