

# Dielectron production in C+C at 1 AGeV with HADES

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The HADES spectrometer installed at GSI Darmstadt is devoted to study production of di-electron pairs from proton, pion and nucleus induced reactions at 1-2 AGeV [1]. The main goal is to search for in-medium modifications of spectral functions of the light vector mesons  $\rho/\omega$  at moderate temperatures and nuclear matter densities of  $\rho_0 - 3^*\rho_0$

The detector became operational in 2002 and since then took data from  $^{12}\text{C}+^{12}\text{C}$  at 2AGeV (2002), 1AGeV (2004) and proton-proton (2004) collisions 2.2 GeV. The main goal of the measurement with  $^{12}\text{C}+^{12}\text{C}$  system is to investigate dielectron enhancement found in  $^{12}\text{C}+^{12}\text{C}$  and  $^{40}\text{Ca}+^{40}\text{Ca}$  collisions at 1 AGeV in the pioneering experiments of the DLS collaboration [2].

In this contribution we would like to focus on the results obtained from  $^{12}\text{C}+^{12}\text{C}$  collisions at 1 AGeV. Identification and analysis techniques developed for reconstruction of rare e+,e- signals will be presented. Invariant mass, rapidity and transverse momentum distributions corrected for reconstruction efficiencies will be shown and compared with calculations based on the thermal (PLUTO) and microscopic (QMD, HSD,RQMD) transport models [3].

[1] P.Salabura et.al., Nucl.Phys., A749(2005)150c

[2] R. J. Porter et al., Phys. Rev., Lett. 79 (1997)1229

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