Contribution ID: **688** Type: **Oral**

Low-mass electrons pairs from $1.23A$ GeV Au+Au Collisions with HADES

Tuesday 7 February 2017 08:50 (20 minutes)

We present a first measurement of low-mass electron pairs for a heavy collision-system at SIS18/Bevalac energies. The data is analyzed in terms of excess radiation above a conventional cocktail of contributions from meson decay after thermal freeze-out. We observe a strong excess radiation which is remarkably well described assuming emission from a thermalized system. The high statistics data allows studying multi-differential distributions. The multiplicity of excess radiation in the mass window 300 to 700 MeV/c^2 rises with A_{part} stronger than linear. To gain deeper understanding of the microscopic origin of the excess radiation we started to investigate di-electron radiation emitted from baryonic resonances produced off protons in pion-induced reactions. The data is in support of VMD in electromagnetic transition of excited baryons.

Preferred Track

Electromagnetic Probes

Collaboration

Other

Primary author: GALATYUK, Tetyana (TU Darmstadt / GSI)

Presenter: GALATYUK, Tetyana (TU Darmstadt / GSI)

Session Classification: Parallel Session 1.3: Electromagnetic Probes (I)

Track Classification: Electromagnetic Probes