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Two-Pion Intensity-Interferometry in Collisions of Au+Au at 1.23A GeV with HADES

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We present results on azimuthally-integrated and azimuthally-dependent analyses of identical pion intensity interferometry (HBT) studied in collisions of Au+Au at $\sqrt{s_{NN}} = 2.4$ GeV. The data are taken with the HADES spectrometer at SIS18/GSI Darmstadt. We study the dependence of the space-time extent of the pion emitting source on the pair transverse momentum and on the collision centrality. We observe a substantial charge sign difference of the source radii, most pronounced at low transverse momenta. The extracted source parameters do well complement the beam-energy dependences at higher energies. Furthermore, we study the evolution (with transverse momentum, centrality, and collision energy) of both, the eccentricity and the tilt angle, of the $\pi\pi$ emission ellipsoid.

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