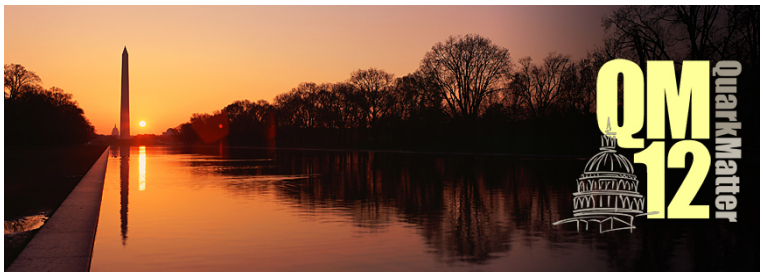

Contribution ID: **300** Type: **Poster**

HBT Measurements for charged pions in √s_{\text{}NN}=39, 62.4 and 200 GeV Au+Au collisions at RHIC-PHENIX

Thursday 16 August 2012 16:00 (2 hours)

HBT measurements are sensitive to the expansion dynamics of the system and they can provide information on the size of the source in space and time at freeze-out (hadron decoupling). Previously, the size of the region of homogeneity has been shown to have an almost linear dependence with particle multiplicity at different beam collision energies. A question of interest is whether the same trend extends across the range in beam energies recently obtained for run-10 of RHIC. To address this question, results for HBT measurements for charged pion pairs at √s_{\text{}NN}=39, 62.4 and 200 GeV beam energies Au+Au collisions, obtained using the PHENIX detector, will be presented. These results will be compared to previous findings at lower collision energies and varying collision systems. The results will also be compared to the recent studies done at √s_{\text{}NN}=2.76 TeV Pb+Pb collisions obtained by the ALICE collaboration.

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