

Abstract Submitted
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Multiplicity Fluctuations in Au+Au Collisions from PHOBOS

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We will present the first PHOBOS results on inclusive charged particle multiplicity fluctuations in Au+Au collisions at 200GeV in the pseudo-rapidity range -3.0 to +3.0. Most dynamical models predict characteristic particle correlations, which can be long range and/or short range, leading to non-statistical dynamic fluctuations. The dynamic fluctuations results as a function of mean pseudo-rapidity and the bin size, are compared to model calculations. The measured dynamic fluctuations are expected to provide useful insights into both short-range and long-range effects in the heavy ion collisions.

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