

Grand Canonical Distribution from LQCD for experiment data analysis

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We propose new way of heavy ion collisions experiment data analysis. We analyze physical parameters of fireball created in RHIC experiment based on Grand Canonical Distribution and different Lattice QCD data available at the moment. Our results on chemical potential are in agreement with previous model estimations and do not depend on Lattice setup. At same time, we found possible $T(V)$ states of fireball and estimated the most probable temperature and volume of fireball as function of collision energy.

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