

Abstract Submitted
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Measurement of the D meson Production through Hadronic Decay Channel at PHENIX SERGEY BUTSYK, LANL, PHENIX COLLABORATION — The Open Charm production have always been considered as one of the unique and unbiased probes to study the properties of the dense matter produced in Heavy Ion collisions at RHIC. PHENIX experiment at RHIC has done a tremendous job of measuring the production rate of the Heavy Flavor particles through their semi-leptonic decay channels. By studying the production in a different colliding systems (p+p, d+Au, Au+Au) we were able to separate both initial and final state effects in nucleon+nucleon collisions at 200 GeV/N. The unanswered question for those measurements was a relative contribution of Open Charm to the mixture of Open Charm and Open Bottom particle decays that were accessible experimentally in semi-leptonic channel. The first results of the direct measurement of D meson production in proton+proton collisions through the hadronic decay channel will be presented. This measurement will should determine the contribution of the Open charm to the mix and also constrain the theoretical models for the Open Charm production at RHIC energies. The current status of analysis, as well as comparison with the most resent theoretical predictions will be presented.

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