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High p_T Charged Hadron Spectrum in Au+Au Collisions at 200 GeV as Measured by PHENIX

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The suppression of single hadrons still provides one of the strongest constraints on energy loss mechanisms in the Quark-Gluon Plasma. At RHIC, neutral pions have provided the best measurement of single particle suppression to date. Charged hadrons have independent sources of systematic uncertainty and can thus provide additional constraints. At PHENIX, the measurement of charged hadrons has been limited to $p_T < 10$ GeV/c by off-vertex background from photon conversions and weak decays mimicking high p_T particles. The silicon vertex tracker upgrade (VTX) will be used to reject this background allowing the measurement of the charged hadron spectrum out to a significantly higher momentum. The VTX is capable of performing precision tracking measurements of the distance of closest approach of a track to the primary vertex (DCA). Off-vertex photon conversions and weak decays are vetoed with the VTX by rejecting tracks with large DCA. The status of high- p_T charged tracking and associated high- p_T charged hadron spectrum will be reported.

On behalf of collaboration:

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