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Comparison of AMPT and HIJING generated p_T spectra at mid-rapidity to those measured in the Beam Energy Scan from STAR STEPHEN HORVAT, Yale University, STAR COLLABORATION — Quenching of high transverse momentum (p_T) charged hadrons can be measured by the nuclear modification factor, which compares binary collision-scaled p_T spectra from central heavy-ion collisions to a reference spectrum, either proton-proton (R_{AA}) or peripheral heavy-ion collisions (R_{CP}) by taking their ratio. At large $\sqrt{s_{NN}}$ the nuclear modification factor at high p_T is observed to be suppressed, i.e. less than unity. The complex array of processes that can modify particle spectra in nuclear collisions span cold nuclear matter effects, a strongly-interacting medium, and an extended phase of hadronic re-scatterings. Measurements of charged hadron $R_{CP}(\sqrt{s_{NN}}, p_T)$ for $\sqrt{s_{NN}}$ = 7.7 - 200GeV show a smooth transition from strong enhancement of high p_{T} charged hadrons at low energies to strong suppression at high energies, crossing unity between 39 and 27 GeV. These data will be compared with event generators such as HIJING and AMPT. RHIC's broad range of collision systems and energies provides us with the tools to test the assumptions of the event generators; facilitating the investigation of the relative contributions from jet quenching and the Cronin Effect to spectra from heavy-ion collisions.

Stephen Horvat
Yale University

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