

Charm Production and Correlations at RHIC

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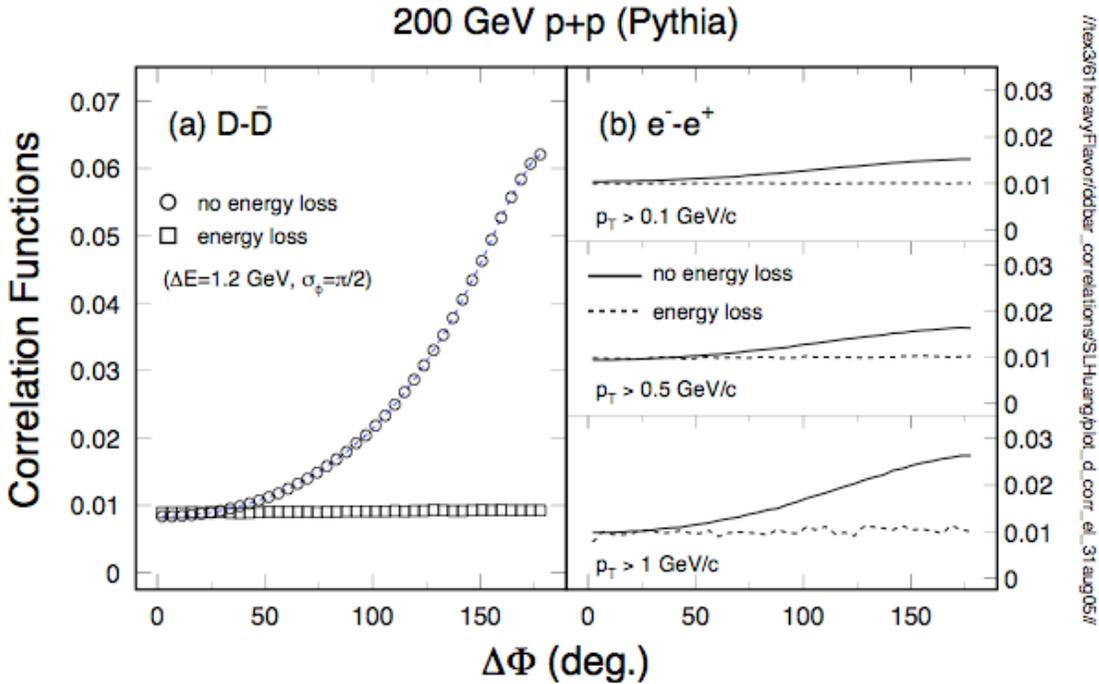


Figure 2: (a) D-meson correlation functions from 200 GeV p+p collisions. Default parameters in the Pythia model [1] were used in the calculations. Circle and square symbols represent the results with and without energy loss, respectively. The parameters of a constant energy loss and angular smearing were set as 1.2 GeV and $\pi/2$. (b) D-meson decayed electron and positron correlation functions for three cuts on the individual electron transverse momentum $p_T > 0.1, 0.5, \text{ and } 1.0 \text{ GeV/c}$. In all cases, the correlation functions were arbitrarily normalized to 0.01. The strength of the correlation function is proportional to the p_T cuts. In case of energy loss, all correlations were smeared out.

200 GeV p+p (Pythia)

