Quark Matter 2015 - XXV International Conference on Ultrarelativistic Nucleus-Nucleus Collisions



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PHENIX measurement of $b\bar{b}$ production in p+p collisions

Tuesday, 29 September 2015 09:00 (20 minutes)

PHENIX has measured the $b\overline{b}$ production cross section in p+p collisions at $\sqrt{s}=500\,{\rm ^{\circ}}{\rm GeV}.$ In the absence of displaced-vertex b-tagging, this is made possible by exploiting the properties of $B^0-\overline{B^0}$ oscillations. Like-sign muon pairs in the PHENIX muon arms are measured in order to extract this signal. We report the $b\overline{b}$ differential cross section in the rapidity range 1.2<|y|<2.2, for dimuon masses in the range 5–10 ${\rm ^{\circ}}{\rm GeV}/c^2$, and extrapolate to the total-production cross section.

On behalf of collaboration:

PHENIX

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