

Abstract Submitted
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Measurements of the total Cu-Cu Cross Section at RHIC¹ ANGELIKA DREES, Brookhaven National Laboratory, COLLIDER-ACCELERATOR DEPARTMENT TEAM — Using the Vernier Scan or Van der Meer Scan technique, where one beam is swept stepwise across the other while measuring the collision rate as a function of beam displacement, the transverse beam profiles, the instantaneous luminosity and the cross section can be measured. The cross section is an important ingredient when the total delivered luminosity is determined and when the instantaneous luminosity is monitored. The experimental detectors need the cross section to normalize their measurements. Though it can be calculated to some level of accuracy it has never been measured so far. This report presents the measurements and the results from the FY2005 Cu-Cu run.

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