

Abstract Submitted
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Determining sampled luminosity in proton-proton collisions at $\sqrt{s} = 500$ GeV at STAR using the vernier scan technique ROSS CORLISS, MIT, STAR COLLABORATION — The STAR experiment at RHIC serves as an excellent laboratory for studying spin in QCD. Comparing predicted and measured cross sections requires accurate measurements of the luminosity. At RHIC, the absolute luminosity of colliding beams is determined through a vernier scan, where trigger rates at STAR are recorded as a function of the impact parameter of RHIC's two proton beams. The details of this method as implemented at STAR will be presented. In particular, the status of the analysis of a 2009 $\sqrt{s} = 500$ GeV trigger based on the STAR barrel electromagnetic calorimeter will be shown.

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