Local Polarimetry at STAR Using the Zero Degree Calorimeter 
Shower Maximum Detector

ALICE BRIDGEMAN, Argonne National Laboratory, STAR COLLABORATION — The polarized proton program at the Relativistic Heavy Ion Collider (RHIC) began colliding beams at a center of mass energy of 500 GeV in 2009, after successful running at a center of mass energy of 200 GeV in previous years. The polarized beams are monitored locally at STAR using various local polarimeters. At 200 GeV, the Beam Beam Counter (BBC) detectors have a sufficiently large analyzing power to work effectively as local polarimeters. At 500 GeV, the BBCs showed a decreased analyzing power. In 2009 the STAR collaboration successfully commissioned the Zero Degree Calorimeter (ZDC) with Shower Maximum Detector (SMD) for use as a local polarimeter at 500 GeV. I will review the work done in this run and discuss plans for the ZDC SMD in future polarized proton running at 500 GeV at STAR.