Abstract Submitted
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Upgrade of the PHENIX Forward Muon Spectrometers for Spin Physics at RHIC[1] JOHN HILL, Iowa State University, PHENIX COLLABORATION — An important part of the RHIC scientific program is devoted to the study of the origin of the proton spin. A part of the spin program is to determine the individual contributions to the proton spin from up and down quarks and their antiquarks. The PHENIX experiment will study these contributions using the forward muon spectrometers to observe muons from the decay of W bosons produced in the collision of 250 GeV polarized protons. Charge of the W allows separation of the contributions of the various quark flavors and parity violation determines their helicities. The muon spectrometer triggers are being upgraded using RPC detectors to track charged particles and provide prompt trigger signals and prompt signals from the muon tracker to discriminate secondary charged pions from muons. The layout for the upgraded spectrometers will be shown with a discussion of the background rejection expected. RPC test results on timing, efficiency and spatial resolution will be shown.

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John Hill
Iowa State University

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