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Multiparticle Measurement in Polarized Proton-Proton Collisions at PHENIX KENICHI NAKANO, Tokyo Institute of Technology, RIKEN, PHENIX COLLABORATION — Polarized deep inelastic lepton-hadron scattering experiments revealed that the contribution of the quark spin to the proton spin is only 20-30%. The remaining component can be carried by the gluon spin and the angular momenta of quarks and gluons. One of the goals of the PHENIX experiment is to obtain the contribution of the gluon spin to the proton spin. With longitudinally polarized proton-proton collisions at RHIC, particles produced with high transverse momentum are measured. The PHENIX experiment has already shown results with single particle production processes. We are analyzing photons and charged particles to measure jet production process. It will give us information on event structure and higher statistics in higher-transverse-momentum region than that in single particle measurements. We need studies for better jet identification methods with a limited acceptance of the PHENIX Central Arms which cannot detect all particles from jets. In this talk, the status of data analysis and studies with event generators will be presented.

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