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Review of recent results from RHIC on the polarized gluon distribution¹

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RHIC provides a unique laboratory to study the spin structure of the proton, using strongly interacting probes. Through remarkable control of the proton acceleration process, RHIC has achieved collisions with 55 to 60% polarized proton beams, at $\sqrt{s}=200$ GeV, with high luminosity. Two experiments, PHENIX and STAR, feature measurements of inclusive production of jets, jet fragmentation products (with emphasis on π^0), and direct photons, which probe the gluon polarization in the polarized protons. I will discuss how we connect the measurements to the underlying physics and the present (sensitive) and future constraints on the gluon spin contribution from RHIC.

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