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**Status and prospects for determining gluon polarization**

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Deep inelastic scattering of polarized electrons and muons from polarized proton, deuterium and  $^3\text{He}$  targets have found that the measured polarization of quarks and antiquarks cannot fully account for the intrinsic spin of the proton. This leaves polarization of gluons and orbital motion of the quark, antiquark and/or gluon constituents as important sources of the intrinsic spin of the proton. This talk will review the present status of experiments conducted by HERMES, COMPASS and at RHIC that aim to determine the polarization of gluons within spin polarized protons. Prospects for further experiments sensitive to gluon polarization by the study of particle production in longitudinally polarized proton collisions at RHIC will also be discussed.