

# Beyond Kinematics for Optimal Hadronic Top Quark Polarimetry

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Top quark polarization measurements provide observables that are sensitive to spin correlation measurements and new physics. The down-type fermion from the W decay is the most powerful spin analyzer from top, which is not straight forward to measure in hadronic decays. Most applications measure top quark spin via an optimal hadronic spin analyzer built from kinematics. In this talk, we discuss how to improve the optimal hadronic polarimetry utilizing machine learning with information beyond simple kinematics.

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