Model independent constraints on spin observables

Jean-Marc Richard

Institut de Physique Nucleaire de Lyon, CNRS-IN2P3 Universite de Lyon, France

Spin observables are crucial to probe the details of the dynamics of hadronic interactions. There exist many identities and inequalities relating various spin observables. Some of them are well known and rather obvious. Other inequalities are less trivial consequences of the constraints of positivity. They are useful to check whether existing measurements are compatible. They also help to decide which new observable will better remove the remaining ambiguities. The formalism will be outlined and examples provided, in particular for the strangeness exchange reaction in antiproton-proton scattering. It will be stressed that the formalism also holds for the spin-dependent parton distributions.