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New DIS results from COMPASS

The COMPASS experiment at CERN performs a rich program in inclusive (DIS) and semi-inclusive (SIDIS) deep inelastic scattering of longitudinally polarised muons off longitudinally polarised nucleons. The main topic is the investigation of the spin structure of the nucleon in terms of quark and gluon polarisations. For the extraction of the contribution of the different quarks flavours to the nucleon spin, in addition to the well known spin-averaged quark distributions the fragmentation functions of quarks into hadrons are needed. Especially the information on the strange quark fragmentation is scarce. Thus, COMPASS is also extracting fragmentation functions from the multiplicities of identified hadrons.

An overview on recent COMPASS results will be given, including the longitudinal spin structure function and a NLO QCD fit, a verification of the Bjorken sum rule, pion and kaon multiplicities, and the latest results on the gluon polarisation.

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