

Studies of the nucleons structure using the SIDIS azimuthal angle asymmetries calculated with modified double ratios of numbers of the hadrons

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The COMPASS collaboration at CERN performs studies of the nucleons structure measuring the muon SIDIS cross sections differences (asymmetries) in numbers of the hadrons (h^+ and h^-) productions by muons from a target with two cells polarized oppositely to each other. These type of asymmetries, related to structure functions of the nucleons, is evaluated via the Double Ratios (DRs) of numbers of the hadrons in which the set-ups' luminosity and acceptance are cancelled. Modifications of the DRs (MDRs), suggested in this work, are aimed at minimization of possible false contributions to the muon SIDIS azimuthal asymmetries in hadron productions. The nucleons structure functions measured with the MDRs of numbers of the hadrons also commented on.

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