

Results and prospects for low-energy QCD processes from COMPASS

Wednesday, 13 September 2017 11:30 (30 minutes)

The COMPASS collaboration investigates since more than 15 years a large variety of high-energy QCD processes at the CERN Super Proton Synchrotron. While the intense 160 GeV muon beam is used for deep-inelastic scattering and the study of nucleon structure functions, a second important part of the program is dedicated to the scattering of 190 GeV pions on a liquid hydrogen and nuclear targets. The latter includes the study of diffractive reactions, used for light-meson spectroscopy, and pion-photon induced reactions, which give access to several quantities of interest for low-energy QCD. The respective results on the pion polarisability, as well as the status for a high-precision determination of the chiral anomaly and reactions involving the pion scattering lengths are discussed.

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Track Classification: Low-energy QCD