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# Exclusive muon-induced reactions at COMPASS

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Investigation of GPDs and TMDs represents the major goal of the COMPASS-II program. Together, GPDs and TMDs provide the most complete description of the
partonic structure of the nucleon.

GPDs are experimentally accessible via lepton-induced exclusive reactions, in
particular DVCS and DVMP. At COMPASS, these processes are investigated using a
160 GeV high intensity muon beam and a 2.5 m long liquid hydrogen target. In
order to optimize the selection of exclusive reactions at these energies, the target is surrounded by a new barrel-shaped time-of-flight system to detect the recoiling particles.

The pure DVCS cross-section and its $|t|$-dependence are extracted from the sum of cross-sections measured with opposite beam charges and polarizations.
From this measurement, the first estimate of the transverse size
of the nucleon in the uncharted $x_{Bj}$ domain from 0.02 to 0.20 will be given.

COMPASS is also capable of accessing several DVMP channels, from which different combinations of quark and gluon GPDs can be extracted. In this talk I will report on the first measurement of the exclusive $\pi^0$ cross section and its $|t|$-dependence in the same $x_{Bj}$ domain from 0.02 to 0.20.

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