

# GPD physics with polarized muon beams at COMPASS

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## Summary

A major part of the future COMPASS program is dedicated to the investigation of the nucleon structure through Generalised Parton Distributions (GPD).

COMPASS will measure DVCS and DVMP reactions with a high intensity muon beam of 160 GeV and a 2.5 m-long liquid hydrogen target surrounded by a new TOF system.

The availability of muon beams with high energy and opposite charge and polarization will allow to access the Compton form factor related to the dominant GPD  $H$  and to study the  $x_B$ -dependence of the  $t$ -slope of the pure DVCS cross section and to study nucleon tomography.

Projections on the achievable accuracies and preliminary results of pilot measurements will be presented.

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