



Contribution ID: 198

Type: **Talk**

## Exclusive Reactions studied in the COMPASS experiment at CERN

*Thursday 1 October 2020 18:15 (25 minutes)*

COMPASS is a multipurpose high energy physics experiment located at the M2 beamline of the SPS at CERN. In 2016 and 2017 COMPASS collaboration performed measurements of lepton-induced hard exclusive reactions using 160 GeV positively and negatively charged muon beams scattering of a liquid hydrogen target. The Deeply Virtual Compton Scattering (DVCS) and Hard Exclusive Meson Production (HEMP) processes, which were explored by the experiment, serve as an important input for the study of the Generalized Parton Distributions (GPDs). The GPDs encode the information about the correlations between longitudinal momentum and transverse spatial distribution of the partons inside the nucleon. They play a crucial role in the description of the 3-dimensional structure of the nucleon in QCD.

Recent COMPASS results from DVCS and HEMP channels and their connection to the GPDs will be presented. Obtained results will be compared with available model predictions.

### Is this abstract from experiment?

Yes

### Internet talk

Yes

### Name of experiment and experimental site

COMPASS at CERN

### Is the speaker for that presentation defined?

Yes

### Details

on behalf of the COMPASS Collaboration

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**Session Classification:** Workshop on QCD