

Studying nucleon partonic structure with the COMPASS unpolarised Drell-Yan programme

Wednesday, 27 July 2016 14:50 (30 minutes)

Since the winter of 2014, COMPASS collaboration at CERN have performed a series of Drell-Yan experiments using a high-intensity negative hadron beam with momentum 190-GeV/c impinging on a transversely polarised ammonia target and unpolarised aluminum and tungsten targets. The experiment provides the first-ever polarized Drell-Yan data, as well as greatly improved statistics for the unpolarised ones. In this talk the physics topics related to unpolarised Drell-Yan and J/ψ measurements will be reviewed, especially focusing on the transverse-momentum-dependent (TMD) Boer-Mulders functions of the pions and protons measured in the unpolarised Drell-Yan process. The expected statistical accuracies will be also shown.

Presenter: SAWADA, Takahiro (Institute of Physics, Academia Sinica)

Session Classification: Nucleon Structure