## **QCD Evolution 2024**



Contribution ID: 51 Type: not specified

## A first implementation of the HSO approach to TMD phenomenology

Thursday, 30 May 2024 12:00 (30 minutes)

We present a first practical implementation of a recently proposed hadron structure oriented (HSO) approach to TMD phenomenology applied to Drell-Yan like processes, including lepton pair production at moderate  $Q^2$  and  $Z^0$  boson production. We emphasize the HSO's preservation of a basic TMD parton-model-like framework even while accounting for full TMD factorization and evolution. We argue that moderate Q measurements should be given greater weight than high Q measurements in extractions of nonperturbative transverse momentum dependence.

**Primary authors:** SIMONELLI, Andrea; ASLAN, Fatma (JLab/UConn); GONZALEZ HERNANDEZ, Jose Osvaldo (Istituto Nazionale di Fisica Nucleare); BOGLIONE, Mariaelena (Istituto Nazionale di Fisica Nucleare); Mr ROGERS, Ted (Old Dominion University / Jefferson Lab); RAINALDI, Tommaso (Old Dominion University)

Presenter: GONZALEZ HERNANDEZ, Jose Osvaldo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Thursday