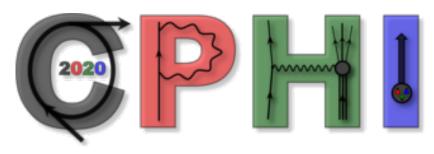
## Correlations in Partonic and Hadronic Interactions - 2020 (CPHI-2020)



Contribution ID: 42 Type: not specified

## TMDs and collinear twist-3 functions in the CSS formalism

Thursday 6 February 2020 09:25 (25 minutes)

I will report on the application of the improved Collins-Soper-Sterman (iCSS) factorization formalism for the case of polarized observables, such as the Sivers effect in semi-inclusive deep-inelastic scattering. I will discuss how this study is being extended beyond leading order; this has direct impact on issues of relating/matching TMDs onto collinear twist-3 functions. I will briefly discuss the validity of the well-known relations, such as between the weighted TMD Sivers function and the collinear twist-3 Qiu–Sterman function, and their use in phenomenological studies of the 3-D structure of hadrons.

**Authors:** GAMBERG, Leonard (Penn State University Berks); METZ, Andreas (Temple University, Philadelphia); PITONYAK, Daniel (Lebanon Valley College); PROKUDIN, Alexey

Presenter: GAMBERG, Leonard (Penn State University Berks)

Session Classification: Morning