

# XXVIII International Workshop on Deep Inelastic Scattering and Related Subjects



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## Global analysis of SSAs in SIDIS, Drell-Yan, $e^+e^-$ annihilation, and proton-proton collisions

*Wednesday, 25 March 2020 14:30 (20 minutes)*

The analysis of single transverse-spin asymmetries (SSAs) gives us tremendous insight into the internal structure of hadrons. For example, the Sivers and Collins effects in semi-inclusive deep-inelastic scattering (SIDIS), Sivers effect in Drell-Yan, and the Collins effect in electron-positron annihilation have been widely investigated over many years in order to perform 3D momentum-space tomography. In addition, observables like  $A_N$  in proton-proton collisions are of interest due to their sensitivity to quark-gluon correlations. In this talk I will report on the first global fit of SSA data from SIDIS, Drell-Yan,  $e^+e^-$  annihilation into hadron pairs, and proton-proton collisions. I will discuss the results of our analysis, including the extraction of a unique set of universal non-perturbative functions that describe all observed SSAs, and also explore avenues for future research.

**Primary author:** PITONYAK, Daniel (Lebanon Valley College)

**Co-authors:** CAMMAROTA, Justin (The College of William and Mary); GAMBERG, Leonard (Penn State); Prof. KANG, Zhongbo (University of California Los Angeles); MILLER, Joshua (Lebanon Valley College); PROKUDIN, Alexei (Penn State Berks); SATO, nobuo (Jefferson Lab)

**Presenter:** PITONYAK, Daniel (Lebanon Valley College)

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