Contribution ID: **209** Type: **Oral presentation**

The JAM fit of spin-dependent PDFs

Tuesday, 29 April 2014 14:30 (30 minutes)

We present results of a new next-to-leading order fit of spin-dependent parton distribution functions from the most recent world data on inclusive polarized deep-inelastic scattering, focusing in particular on the large-x and low-Q² regions. By directly fitting polarization asymmetries we eliminate biases introduced by using polarized structure function data extracted under nonuniform assumptions for the unpolarized structure functions. For analysis of the large-x data we implement nuclear smearing corrections for Deuteron and ³He nuclei, and systematically include target mass and higher twist corrections to the g₁ and g₂ structure functions at low Q². We also explore the effects of Q² and W² cuts in the data sets, and the potential impact of future data on the behavior of the spin-dependent parton distributions.

Primary author: JIMENEZ-DELGADO, Pedro (Jefferson Lab)

Co-authors: ACCARDI, Alberto (Hampton U. and Jefferson Lab); MELNITCHOUK, Wally (Jefferson Lab)

Presenter: ACCARDI, Alberto (Hampton U. and Jefferson Lab)

Session Classification: WG6: Spin Physics

Track Classification: WG6: Spin Physics