

XXIV International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS16)



Contribution ID: 232

Type: **not specified**

Tagged spectator DIS off a polarized spin-1 target

Tuesday, April 12, 2016 10:10 AM (15 minutes)

We cover the general structure of the SIDIS cross section with a polarized beam and spin-1 target. The cross section is characterized by 41 structure functions of which 23 are unique to the spin-1 target case. Next, we study a specific example, namely DIS off a polarized deuteron with a slow detected nucleon in the final state ("tagged spectator DIS"). The reaction is studied in the impulse approximation using the virtual nucleon approximation. In these approximations, 25 structure functions are non-zero (16 of which are sensitive to the deuteron tensor polarization). Finally, we discuss possibilities of measurements of the structure functions at JLab12 and an EIC and their sensitivity to neutron structure functions.

Primary authors: Dr WEISS, Christian (Jefferson Lab); Prof. SARGSIAN, Misak (Florida International University); Prof. COSYN, Wim (Ghent University)

Presenter: Prof. COSYN, Wim (Ghent University)

Session Classification: WG6 Spin Physics

Track Classification: Spin Physics