

## SIDIS cross sections: perturbative and non-perturbative aspects

*Wednesday, 1 June 2016 10:00 (30 minutes)*

I will address the study of semi-inclusive deep inelastic scattering cross sections over a wide range of transverse momenta, and in particular in the region of low to moderate  $q_T$ , when the interplay between perturbative and non-perturbative effects becomes more relevant. Some realistic SIDIS kinematical configuration will be considered where the commonly used prescription of "matching" through the so-called Y-factor cannot be applied. Moreover, I will discuss the theoretical uncertainties of the transverse momentum resummed cross sections in the CSS formalism related to the scale parameters  $C_1$ ,  $C_2$  and  $C_3$ , and their interplay with the uncertainties of the non perturbative parameters  $g_1$ ,  $g_2$  and  $g_3$ .

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**Session Classification:** Talks