

XXVIII International Workshop on Deep-Inelastic Scattering and Related Subjects



Contribution ID: 575

Type: **Contributed Talk**

Towards DIS at N4LO

Thursday, April 15, 2021 1:35 PM (20 minutes)

I will report on an ongoing effort towards calculating the N4LO perturbative QCD corrections to the DIS total inclusive cross-section. We are developing a method based on differential equations and series expansion in the inverse Bjorken parameter. As a byproduct our calculation should also deliver analytic or at least precise numerical approximations for the four-loop splitting functions.

Primary author: Mr BASDEW-SHARMA, Avanish (Nikhef)

Co-authors: Dr HERZOG, Franz (The University of Edinburgh); Dr PELLONI, Andrea (Nikhef)

Presenter: Mr BASDEW-SHARMA, Avanish (Nikhef)

Session Classification: Structure function and parton densities

Track Classification: Structure Functions and Parton Densities