Contribution ID: **29** Type: **not specified**

Simulating Double Parton Scattering with dShower

Thursday, November 21, 2019 3:25 PM (20 minutes)

In this talk, a new Monte-Carlo simulation of double parton scattering (DPS) at parton level is presented. In this simulation, the dynamics of the 1⟶2 perturbative splittings is consistently included, with the impact-parameter dependence taken into account. The evolution is performed using an angular-ordered parton shower which is combined with a set of double parton distributions that depend explicitly on the inter-parton distance. We present some results from an illustrative study in the context of same-sign WW production at the LHC. In several distributions we see differences compared to DPS models in Herwig, Pythia, and the DPS "pocket formula".

Primary authors: CABOUAT, Baptiste (University of Manchester); GAUNT, Jonathan Richard (CERN)

Presenters: CABOUAT, Baptiste (University of Manchester); GAUNT, Jonathan Richard (CERN)

Session Classification: Double Parton Scattering

Track Classification: Double Parton Scattering