

Single Perturbative Splitting Diagrams in Double Parton Scattering

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I will discuss the role of a particular class of graph in the double parton scattering total cross section. These are the '2v1' or 'single perturbative splitting' graphs, in which two 'nonperturbatively generated' (NP) ladders interact with two ladders that have been generated via a perturbative 1->2 branching process. I will argue that these graphs do contribute to the LO DPS cross section, albeit with a different geometrical prefactor to the one that applies to the '2v2'/zero perturbative splitting' graphs. I will also show that in these graphs there can be 'crosstalk' between the NP ladders, and discuss the numerical significance of this crosstalk.

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