

Hard diffraction in Pythia8

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We present a new model for hard diffraction in Pythia8. The model uses the Pomeron approach pioneered by Ingelman and Schlein, factorising the diffractive cross section into a Pomeron flux and a Pomeron PDF, with several choices for both implemented in Pythia8.

The main feature of the model is that it allows for any Pythia8 hard process to be generated diffractively, and includes an option of restricting the number of MPIs in the diffractive system to ensure survival of the rapidity gap. The new model has been used in a Monte Carlo study on diffractive dijet production from which preliminary results will be shown.

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