

Have we reached asymptotia in pp scattering?

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Summary

We discuss recent LHC data for total, inelastic and elastic pp scattering collected at 7 TeV. We use our K_t -resummation model to discuss the total and the inelastic cross-section, within the framework of a two component eikonal model. We then discuss the asymptotic properties of the scattering amplitude, such as saturation of the Froissart bound, the black disk and the Pomplin limit, the vanishing of the rho parameter. A simple model with two exponentials and a phase is used to describe the elastic differential cross-section for both pp and pbarp and test two asymptotic rules derived from the hypothesis of total absorption.

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