

Small-x QCD and forward physics results from CMS

The CMS Collaboration has a comprehensive program of small-x QCD and forward physics measurements, which is supported by an excellent experimental coverage into the very forward phase space. Some of the highlights in terms of testing QCD at low-pt and at high pseudorapidities with jets and charged particles are summarized. Also extremely rare processes, as the measurement of exclusive W -pair production in photon-photon collisions in pp data are discussed. The range of physics results is complemented with studies of diffractive collisions, as well as of multi-parton interaction and soft-QCD phenomena. The measurement of the underlying event at different center-of-mass energies is another core result that will be presented. An outlook to the prospects at 13 TeV is given.

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Track Classification: Multi-parton Dynamics