

**REVIEW OF DIFFRACTIVE PHYSICS RESULTS
FROM THE CDF EXPERIMENT AT THE TEVATRON ***

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Measurements of soft and hard diffractive processes have been performed at the Tevatron $p\bar{p}$ collider during the past decade. Diffractive events are studied by means of identification of one or more rapidity gaps and/or a leading antiproton. Here, results are discussed within the Tevatron data and compared to those obtained at the HERA ep collider. The traditional “pomeron” is described within the framework of QCD and the issues discussed include pomeron structure, diffractive cross section factorization, and universality of rapidity gap formation.

Experimental results include the study of various diffractive processes, the determination of the diffractive structure function at different values of the exchanged momentum transfer squared in the range $0 < Q^2 < 10,000 \text{ GeV}^2$, the four-momentum transfer $|t|$ distribution in the region $0 < |t| < 1 \text{ GeV}^2$ for both soft and hard diffractive events up to $Q^2 \approx 4,500 \text{ GeV}^2$. A novel technique to align the Roman Pot detectors is also presented.

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