

## High Energy $\bar{p}p$ and $pp$ Elastic Scatterings in QCD Inspired Model

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**Abstract:** We propose QCD inspired model to calculate  $\bar{p}p$  and  $pp$  elastic scatterings at high energies in this paper. A calculation for total cross section of  $\bar{p}p$  and  $pp$  is performed in which the contributions from gluon-gluon, quark-quark, and gluon-quark interactions are included. Our results show that the QCD inspired model gives a perfect fit to experimental data of total cross section both for  $\bar{p}p$  and  $pp$  elastic scatterings at the whole energy region where experimental data existed at FNAL and CERN.

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Key words: QCD inspired model, eikonal profile function, high-energy elastic scattering

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