

UNITARITY EFFECTS IN ELASTIC  
SCATTERING OF HADRONS AND DEEP  
INELASTIC LEPTON-HADRON SCATTERING

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S u m m a r y

Effects of the unitarity condition are studied for the phenomenological amplitudes of elastic scattering of hadrons. It is shown that the unitarity condition is broken for the energies of  $\sim 10^3$  TeV. Two unitarization methods are considered: eikonal method and U-matrix one. Both give similar results for the energies of the existing colliders. The predictions for the total cross sections differ for the energies of the being built LHC collider ( $\sqrt{s} = 14$  TeV). The region of values for  $(x, Q^2)$  is pointed out, for which it is necessary to take into account the unitarization in deep inelastic scattering.