

Michal Praszalowicz: Scaling of the elastic pp cross-section

In this talk, we explore the phenomenology of the property that the ratio of “bump” to “dip” positions of the elastic differential cross section is constant over the energy range from the ISR to the LHC. We review the old idea of geometric scaling at the ISR and discuss possible scaling laws at the LHC. We also discuss constraints on the parametrizations of the elastic scattering amplitude that result from this observation.