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Spin component of the Pomeron from data on Coulomb-nuclear interference

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Small-angle polarized elastic pp scattering dominated by Coulomb-nuclear interference (CNI) open a unique chance to access the spin component of the Pomeron. Our analysis of data on single-spin asymmetry at $\sqrt{s}=200$ GeV reveals a considerable spin-flip component, missed in the previous analyses because of lack of absorptive corrections. Analogous, much more precise measurements at lower energies also demonstrate large hadronic spin-flip, which might partially related to the contribution of Reggeons. We performed a global Regge analysis of CNI data at different energies and disentangle spin-flip parts of the Pomeron and Reggeons. We observe a faster rise of the Pomeron spin-flip with energy in comparison with the non-flip amplitude in accordance with theoretical expectations.

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