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Charmed baryon pair production in effective Lagrangian and Regge approaches

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Strange and charmed baryon pair productions in proton-antiproton collisions are studied in effective Lagrangian and Regge approaches. Unknown parameters from both models are determined from the comparison with the existing data for strangeness productions. Then, we predict charm production cross sections by extrapolating the amplitudes for strangeness productions to those for charm. From our study, charm production cross sections are about 10^{-4} to 10^{-5} times smaller than those of strangeness productions. Our results can be tested in the future experiments at PANDA.

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