FEASIBILITY STUDY FOR THE SEARCH OF INTRINSIC CHARM AT THE COMPASS EXPERIMENT AND AT THE STAR FIXED-TARGET PROGRAM

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Intrinsic charm is a rigorous first-principle feature of QCD and the Operator Product Expansion, and it has been verified in many collider and fixed target experiments. On the other hand, all experimental results are not fully clear. In this talk we conduct a feasibility study for the search of the intrinsic charm mechanism at the COMPASS experiment using the CERN π^- beam at 190GeV/c and at the STAR fixed-target program using the proton beam of the Relativistic Heavy Ion Collider (RHIC) at 200 GeV/c. We also re-review the double J/ ψ production data provided by the NA3 experiment using the CERN pion beam at 150 and 280 GeV/c with incident on hydrogen and platinum targets. The different production mechanisms are discussed.

