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## Heavy hadron pair production at proton-antiproton collisions within a double handbag approach

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We study the pair-production of heavy mesons in proton-antiproton annihilations within a perturbative QCD motivated framework [A.T. Goritschnig, B. Pire and W. Schweiger, Phys.Rev. D87 (2013) 014017]. In particular we investigate  $p\bar{p}$  to  $p\bar{p} D^0 \bar{D}^0$  within a double handbag approach, where the hard process  $u\bar{u} d\bar{d}$  to  $c\bar{c} q\bar{q}$  factorizes from soft matrix elements of  $c\bar{c} q\bar{q}$  operators. The soft matrix elements can be parameterized by transition distribution amplitudes, which are off-diagonal in flavor space. The transition distribution amplitudes are modelled by representing them as overlaps of light-cone wave-functions (where we have treated the proton within a quark-diquark picture). We obtain rather robust model results for  $p\bar{p} \rightarrow D^0 \bar{D}^0$  cross sections, which are also expected to be measured at the future PANDA detector at GSI-FAIR.

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