

The elliptic flow of open heavy flavor in pA collisions from initial state

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The azimuthal angular correlation between a heavy-flavor meson (J/Ψ and D^0) and a light hadron has been measured firstly by the CMS experiment. The elliptic flow of J/ψ from the initial state has been successful described not long ago. We investigate the angular correlation between an open heavy flavor meson and a charged light hadron in the Color Glass Condensate framework. Our results show that open heavy flavor mesons (D^0 and B) also have a sizable v_2 which has a strong mass dependence. The resulting v_2 of D^0 coincides with recent CMS data. In addition, our prediction for the v_2 of non-prompt D mesons decayed from B mesons perfectly agrees with the recent CMS measurement.

Publications

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