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The elliptic flow of D^0 meson in pA collisions from the 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 successfully described recently. We investigate the angular correlation between a D^0 meson and a charged light hadron in the Color Glass Condensate framework. Our results show that D^0 meson also has a sizable v_2 , which agrees with the CMS results. In addition, we make the prediction for the elliptic flow of B meson.

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