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## The $Y(4230)$ as a $D_1 D$ molecule

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We investigate the nature of the  $Y(4230)$  in a simultaneous fit of the  $DD^*\pi$ ,  $J/\psi\pi\pi$  and  $h_c\pi\pi$  crosssections and invariant mass spectra of the subsystems. We show to what extend a single  $D_1 D$  bound state can explain the non-trivial asymmetric lineshape observed in these channels. At the same time we study if the  $Z_c(3900)$  observed in the  $J/\psi\pi$  invariant mass distribution can be understood as a  $D^* D$  molecule or is a simple re-scattering effect.

### Collaboration

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