

## A study of $d^*(2380)$ resonance

*Friday, 26 October 2018 17:00 (15)*

The newly observed  $d^*(2380)$  resonance ( $I(J^P) = 0(3^+)$ ) is studied based on a chiral constituent quark model. Its overall properties, including the mass, the partial decay widths in various decay modes, and the total width, are well reproduced in our calculation and with a compact scenario. Our results show that a compact hexaquark dominated structure might be a reasonable interpretation for this resonance. In addition, its charge distribution is also discussed.

**Primary author(s) :** Prof. DONG, Yubing (Institute of High Energy Physics, The Chinese Academy of Sciences)

**Co-author(s) :** Prof. SHEN, Pengnian (Institute of High Energy Physics, The Chinese Academy of Sciences); Prof. ZHANG, Zongye (Institute of High Energy Physics, The Chinese Academy of Sciences)

**Presenter(s) :** Prof. DONG, Yubing (Institute of High Energy Physics, The Chinese Academy of Sciences)

**Session Classification :** Particle Physics

**Track Classification :** Particle physics