Service de Physique Nucléaire



Séminaire

le vendredi 5 juillet 2013 à 11h00

CEA Saclay, Orme des Merisiers, Bât. 703, Salle 135

The threshold resonance production of heavy quarkonium exotic states

Qiang Zhao

Institute of High Energy Physics, Beijing, China

The recent observations of XYZ heavy quarkonium states have initiated a lot of interests in the heavy quarkonium spectroscopy. In particular, the observations of signals for charged heavy quarkonium states, such as $Z_b(10610)$ and $Z_b(10650)$ by the Belle Collaboration, and $Z_c(3900)$ by the BESIII Collaboration, provide a great opportunity for the study of QCD exotics. I will review some of the theoretical explanations for their puzzling properties, and then discuss an important kinematic condition in favor of the production of some of those "threshold states" in heavy quarkonium decays. Criteria for further identifying exotic states will also be discussed.