Contribution ID: 34

Type: not specified

Hidden $b\bar{b}$ tetraquark spectroscopy and evidence in Belle data near the $\Upsilon(5S)$ resonance

In the past several years, experiments at the two B-factories, BaBar and Belle, and at the Tevatron collider, CDF and D0, have discovered an impressive number of new hadronic states in the mass region of the charmonia labeled as X, Y and Z, which, however, defy a conventional $c\bar{c}$ charmonium interpretation. Different frameworks have been suggested to describe the observed states, among which the tetraquark model is a promising candidate. According to Heavy Quark symmetry the puzzling states should find their counterpart in the $b\bar{b}$ sector. This talk provides an overview of the calculation of doubly bottom tetraquark masses, discusses their evidence in the R_b -scan performed by BaBar and presents a tetraquark interpretation of the anomalous Belle data found near the $\Upsilon(5S)$ resonance.

Primary author: Mr HAMBROCK, Christian (DESY)

Presenter: Mr HAMBROCK, Christian (DESY)