



Contribution ID: 182

Type: Talk

Testing the hadro-quarkonium model on the lattice

Monday, July 25, 2016 5:45 PM (20 minutes)

Recently the LHCb experiment found evidence for the existence of two exotic resonances consisting of $c\bar{c}uud$ quarks. Among the possible interpretations there is the hadro-charmonium model, in which charmonium is bound “within” a hadron. We test this idea on CLS $n_f=2+1$ lattices using the static formulation for the heavy quarks. We find that the static potential is modified by the presence of a hadron. It becomes more attractive and the effect is of the order of few MeV.

Author: Prof. KNECHTLI, Francesco (University of Wuppertal)

Co-authors: Dr MOIR, Graham (University of Cambridge); Prof. BALI, Gunnar (University of Regensburg); Mr ALBERTI, Maurizio (University of Wuppertal); Dr COLLINS, Sara (University of Regensburg); SOELDNER, Wolfgang (Regensburg University)

Presenter: Prof. KNECHTLI, Francesco (University of Wuppertal)

Session Classification: Hadron Spectroscopy and Interactions

Track Classification: Hadron Spectroscopy and Interactions