

Seminar on Lattice QCD and High Energy Physics

Speaker: Professor Hai-Yang Cheng
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Title: ABC of XYZ

Abstract:

An introduction to the quarkonium-like states, dubbed the XYZ mesons which have been observed ever since 2003, is presented in this talk. The underlying structure of these XYZ mesons is still not clear: they could be molecular, tetraquark, diquarkonium, or hybrid states in nature. The charged Z_c and Z_b mesons are manifestly exotic, but their existence is under debate as they might be mimicked by coupled channel cusp effects. Lattice QCD searches for XYZ states will be addressed. I will also discuss the Born-Oppenheimer approximation, a framework based on QCD that describes all these XYZ mesons.

Date and Time: 14:20, December 1, 2014

Place: Rm 716, New Physics Building, National Taiwan Univ.

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