



Contribution ID: 294

Type: not specified

Study of the newly discovered mesons in the charm region with chiral fermions.

Thursday, 17 June 2010 15:50 (20 minutes)

We investigate if the newly discovered mesons in the charm region, such as $D_s(2317)$, $X(3872)$, $Z^+(4430)$, are tetraquark mesoniums. With quarks and antiquarks in periodic and antiperiodic boundary conditions respectively in the spatial directions, we try to find out if the ground states from the tetraquark interpolation fields are one meson or two meson states. We use valence overlap fermions on 2+1 flavor domain wall fermion configurations. Z_4 grid sources are adopted to increase statistics.

Please, insert your presentation type (talk, poster)

talk

Primary author: GONG, Ming (University of Kentucky)

Co-authors: Dr ALEXANDRU, Andrei (The George Washington University); Dr LI, Anyi (Duke University); Prof. LIU, Keh-Fei (University of Kentucky); Prof. DRAPER, Terrence (University of Kentucky)

Presenter: GONG, Ming (University of Kentucky)

Session Classification: Parallel 45: Hadron spectroscopy

Track Classification: Hadron spectroscopy