Contribution ID: **62** Type: **Parallel contribution**

Chiral field theory of 0-+ glueball

Friday, 12 August 2011 16:20 (20 minutes)

A chiral field theory of 0^{-+} glueball is presented. The Lagrangian of this theory is constructed by adding a 0^{-+} glueball field to a
successful Lagrangian of chiral field theory of pseudoscalar, vector, and axial-vector mesons.
The couplings between the pseodoscalar glueball field and
the mesons are via U(1) anomaly revealed.
Quantitative study of the physical processes of the 0^{-+} glueball of $m = 1.405$GeV is presented.
In this talk following topics are presented:
a new chiral field theory of 0^{-+} glueball;
mass mixing between $\eta, \eta', \ and \ 0^{-+}(\eta(1405))$ glueball;
kinetic mixing;
$J/\psi \to \gamma\eta(1405)$ decay;
$\eta(1405) \to \gamma\gamma, \gamma\rho, \gamma\omega, \gamma\phi, \gamma\pi\pi, \gamma KK$ decays;
$\eta(1405) \to \rho\pi\pi$ and strong decays of $\eta(1405)$.

The theoretical predictions can be used to identify the 0^{-+} glueball.

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Session Classification: Hadron Spectroscopy

Track Classification: Hadron Spectroscopy