

Light hybrid mesons and light glueballs

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We revisit the present status of the lightest nonet of hybrid mesons with quantum numbers $J^{PC} = 1^{-,+}$, that includes the resonance $\pi_1(1600)$ as well as the recently discovered $\eta_1(1855)$. In the framework of an hadronic approach, predictions for not-yet measured decay rates of the two resonances listed above as well as for the not yet found members of the nonet (an isoscalar with a mass of about 1.6 GeV and a kaonic isodoublet with a mass of about 1.75 GeV) are presented. The production of the isoscalar members in the decay of the j/ψ charmonium are also discussed. Next, we present the status and progress concerning of the three lightest glueball states: scalar, tensor, and pseudoscalar. Here, new experimental and theoretical results allow to investigate various glueball candidates.

Parallel Session

Hadron Spectroscopy

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