

Hybrid phenomenology in a chiral symmetric model

We study the vacuum properties of hybrids by using the so-called extended Linear Sigma Model (eLSM). This model includes scalar and pseudoscalar mesons, as well as vector and axial-vector mesons. We enlarge the eLSM by including the low-lying hybrid nonet with exotic quantum numbers $J^{PC} = 1^{-+}$ and the nonet of their chiral partners with $J^{PC} = 1^{+-}$ to a global $U(3)_r \times U(3)_l$ chiral symmetry. Then, we predict the hybrid nonets masses and their decay ratios that may guide ongoing and upcoming experiments

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Session Classification : Evening session 10

Track Classification : Chiral Symmetry Breaking in Hadron Physics