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Non-ordinary meson couplings in the 1/Nc expansion

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We study the large Nc behavior of couplings among light meson states with different compositions in terms of quarks and gluons. We shortly review the most common compositions of mesons, which are of interest for the understanding of low-lying meson resonances, namely, the ordinary quark-antiquark states as well as the non-ordinary, glueball, tetraquark, etc. We dedicate special attention to Jaffe's generalization of the tetraquark with Nc-1 quark-antiquark pairs, that is the only type of state we have identified, whose width does not necessarily vanish with large Nc while it does decouple exponentially with Nc from the pion-pion channel, so that is weakly coupled to the meson-meson system. (see arXiv:1405.4831, Phys.Rev. D90 (2014) 3, 036003)

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