

## **Do Compositions of light scalar mesons have any effect on chiral symmetry restoring transition?**

We study the QCD phase diagram in a two flavour chiral quark-diquark model and regard tetraquark state as made up of diquark-antidiquark. For parameter fixing we consider two scenarios where, in one case  $f(600)$  and another heavy meson around 1.3 GeV is considered to be quarkonium and tetraquark states respectively. In another case the opposite assignments is considered. We then study the chiral symmetry restoration with two scalar condensates, namely the conventional chiral and tetraquark condensates and review how above mentioned two scenarios affect the phase structure of QCD.

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