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Investigation of the tetraquark candidate a_0(980): preliminary results

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We carry out a study of the light scalar meson a_0(980) employing interpolating field operators of quark-antiquark, diquark-antidiquark, mesonic molecules and two-particle meson operators. Both connected and disconnected quark loops are investigated. We present preliminary results for two ensembles of 2+1 clover fermion gauge configurations generated by the PACS-CS collaboration with pion masses ~300 MeV and ~150 MeV.

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