

Updated spectroscopy for SU(3) with eight fundamental flavors

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I present updated spectroscopy results from the LSD collaboration on SU(3) gauge theory with $N_f = 8$ degenerate fermions in the fundamental representation, using nHYP-smeared staggered fermions. The new results include added statistics, a more sophisticated systematic error analysis, and the use of joint fits to stabilize estimates of the 0^{++} scalar meson mass. We find persistent evidence for a very light 0^{++} scalar, roughly degenerate with the pions and far below the rest of the spectrum. A detailed comparison with the $N_f = 4$ theory using the same lattice action is also presented.

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