

Baryon spectrum of SU(4) composite Higgs theory with two distinct fermion representations

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We describe our recent lattice study of the baryon spectrum of SU(4) gauge theory with fully dynamical Wilson-clover fermions in the fundamental and sextet representations. This system is closely related to a model of physics beyond the Standard Model containing a composite Higgs. The model also contains a partially composite top quark, which mixes linearly with a new baryon of SU(4) containing fermions in both representations. We will describe the overall baryon spectrum and implications for collider searches for the top quark partner.

Primary author: Mr JAY, William (University of Colorado Boulder)

Co-authors: Prof. SVETITSKY, Benjamin (Tel Aviv University); HACKETT, Daniel (University of Colorado, Boulder); Prof. NEIL, Ethan (University of Colorado, Boulder); DEGRAND, Thomas; Dr AYYAR, Venkitesh (University of Colorado, Boulder); Dr SHAMIR, Yigal (Tel Aviv University)

Presenter: Mr JAY, William (University of Colorado Boulder)

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