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Universality of the continuum limit for the H dibaryon

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A previous calculation of the binding energy of the H dibaryon in SU(3)-flavour-symmetric lattice QCD showed unexpectedly large discretization effects. To better understand this, we have repeated the calculation using different lattice actions based on $N_f = 3$ ensembles from CLS and OpenLat and newly generated $N_f = 3 + 1$ ensembles with highly improved staggered quarks. Results will be shown for two different unitary setups and at least three different mixed actions. Although we obtain compatible continuum limits, we find that the size of discretization effects varies considerably.

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