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## Thermodynamics of strongly-coupled lattice QCD in the chiral limit

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In the strong coupling limit,  $n$ -point functions in lattice QCD with staggered fermions can be rewritten exactly as traces over constrained configurations of monomers, dimers, and baryon loops covering the spacetime lattice. Worm algorithms provide efficient global sampling methods over such ensembles, and are particularly efficient in the chiral limit. We study the thermodynamics of strongly-coupled  $U(3)$  and  $SU(3)$  lattice QCD with one massless staggered fermion using such methods, and compare the results with the relativistic pion gas.

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