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## Lattice calculation for unitary fermions in a finite box

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A fundamental constant in systems of unitary fermions is the so-called Bertsch parameter, the ratio of the ground state energy for spin paired unitary fermions to that for free fermions at the same density. I discuss how we computed this parameter as well as the pairing gap using a recently developed lattice construction for unitary fermions, by measuring correlation functions for up to 38 fermions in a finite box. Our calculation illustrates interesting issues facing the study of many-body states on the lattice, which may eventually be confronted in QCD calculations as well.

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talk

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