

Abstract Submitted  
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**Sparsening algorithms for lattice QCD calculations** WILLIAM DETMOLD, Massachusetts Institute of Technology MIT — Modern advances in algorithms for lattice QCD calculations have steadily driven down the resources required to generate gauge field ensembles and calculate quark propagators, such that, in cases relevant to nuclear physics, performing quark contractions to assemble correlation functions from propagators has become the dominant cost. I will describe a new propagator sparsening algorithm for forming correlation functions describing multi-hadron systems, such as light nuclei, with reduced computational cost.

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