

Abstract Submitted
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Even-odd correlations in optical lattices ELIOT KAPIT, ERICH MUELLER, Cornell University — We study how different many body states appear in a quantum gas microscope, such as the one developed at Harvard. We focus on the spatial correlations of the microscope images, which are related to the correlations of the parity of the number of atoms at each site. We consider a number of well-known models: free or weakly interacting bosons, the large U Bose-Hubbard model, and noninteracting fermions.

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