

**Some Important Issues in Condensed Matter Resolvable with Precision in
Current Optical Lattice Experiments**

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We shall discuss a number of important issues in condensed matter physics that can be precisely resolved within the current capability of optical lattice experiments in the near future. Our discussions will include the realization of itinerant ferromagnetism, a systematic way to map out the entire many-body wavefunction of a fermion Hubbard cluster, and the study of the origin of the recently discovered insulating phase in twisted bilayer graphene.