

Abstract Submitted
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Magnetism and pairing of two-dimensional trapped fermions SIMONE CHIESA, UC Davis, CHRIS VARNEY, MARCOS RIGOL, Georgetown University, RICHARD SCALETTAR, UC Davis — We present results obtained using exact quantum Monte Carlo simulations for two dimensional trapped fermions and address the effect that temperature, interaction strength, and inhomogeneity play in quantum gases when they are cooled towards the magnetic scale. We show how antiferromagnetism emerges in the Mott insulating domains, around which d-wave pairing is significantly enhanced.

Simone Chiesa
UC Davis

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