

Abstract Submitted
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Quantum magnetic phases in harmonically trapped two-component bosons BARBARA CAPOGROSSO-SANSONE, ITAMP, Harvard-Smithsonian Center for Astrophysics, MARCO GUGLIELMINO, VITTORIO PENNA, Physics Dept. Politecnico di Torino — We consider a two-component bosonic system trapped in a harmonic potential. We use large scale Quantum Monte Carlo simulations to study under which experimental conditions magnetic phases, e.g. Ising antiferromagnet (checkerboard solid), can be observed in the trap.

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