

Abstract Submitted  
for the APR10 Meeting of  
The American Physical Society

**Phase-fluctuating regime of a ring-shaped Bose-Einstein condensate** LUDWIG MATHEY, ANAND RAMANATHAN, KEVIN WRIGHT, WILLIAM PHILLIPS, CHARLES CLARK, NIST — We study the phase-fluctuating condensate regime of ultra-cold atoms trapped in a ring-shaped geometry. We first consider a simplified box geometry, in which we identify the conditions to create a state that is dominated by thermal phase fluctuations, and then explore the actual experimental geometry. We also address possible ways of detecting this regime.

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Date submitted: 26 Oct 2009

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