Dipolar BEC in an Artificial Magnetic Field ZALIHE ÖZÇAKMAKLI, CEM YÜCE — In this paper, we study the dipolar BEC in an artificial magnetic field. Using the adiabatic approximation, we obtain an effective equation of motion for the atoms driven to the dark state. We discuss the influence of artificial magnetic field on the critical angular velocity for the vortex formation.

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Date submitted: 29 Mar 2011

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