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**Multiple semiclassical solutions for a nonlinear Choquard equation with magnetic field.**  
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Summary: In the present paper, we study the existence of multiple solutions for a nonlinear Choquard equation in the presence of a magnetic field. Using variational methods, penalization techniques and Ljusternik-Schnirelmann theory, we relate the number of solutions with the topology of the set where the potential attains its minimum value.

**MSC:**

**35Q55** NLS equations (nonlinear Schrödinger equations)  
**35A15** Variational methods applied to PDEs  
**58E05** Abstract critical point theory (Morse theory, Lyusternik-Shnirel'man theory, etc.) in infinite-dimensional spaces

Cited in **15** Documents

**Keywords:**

Choquard equation; magnetic field; variational methods; penalization techniques; Ljusternik-Schnirelmann theory

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