2005 Vol.44 No.1 pp.45-48 DOI:

Energy Spectrum of Helium Confined to a Two-Dimensional Space

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(Received: 2004-11-9; Revised:)

Abstract: Making use of the adiabatic hyperspherical approach, we report a calculation for the energy spectrum of the ground and low-excited states of a two-dimensional helium in a magnetic field. The results show that the ground and low-excited states of helium in low-dimensional space are more stable than those in three-dimensional space and there may exist more bound states.

PACS: 03.65.-w, 32.60.+i, 31.15.Ar

Key words: helium atom, energy spectrum

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