

# Poster Presentations

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## The heat capacity of GaAs semiconductor quantum dot presented in magnetic fields

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### Abstract

The heat capacity of two interacting electrons confined in a parabolic quantum dot presented in a magnetic field had been calculated by solving the Hamiltonian using exact diagonalization method. We had investigated the dependence of the heat capacity on temperature, magnetic field and confining frequency. The singlet triplet transitions in the ground state of the quantum dot spectra and the corresponding jumps in the heat capacity curves had been shown. The comparisons show that our results are in very good agreement with reported works.

**Key words:** Heat capacity; Exact diagonalization; Magnetic Field ; Quantum Dot.