

Contribution ID: 2544 Type: Oral Competition (Graduate Student) / Compétition orale (Étudiant(e) du 2e ou 3e cycle)

First Order Relativistic Correction to Landau Levels in the Presence of a Parallel Linear Electric Field

Tuesday 4 June 2019 16:00 (15 minutes)

We consider a three-dimensional system where a relativistic electron moves under a constant magnetic field and a linear electric field parallel to the magnetic field above the z=0 plane and antiparallel below the plane. We use the Dirac equation and perturbation theory to determine analytically the first order relativistic correction to the Landau levels under the above static fields.

Author: AUDIN, Yann (Bishop's University)

Presenter: AUDIN, Yann (Bishop's University)

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