

Dirac Particle in a Constant Magnetic Field: Path Integral Treatment

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The Green functions related to a Dirac particle in a constant magnetic field are calculated via two methods, global and local, by using the supersymmetric formalism of Fradkin and Gitman. The energy spectrum as well as the corresponding wave functions are extracted following these two approaches.

Key words: Path Integral; Dirac Equation; Propagator.