

Propagation of photon in a diluted medium moving parallel to the magnetic field: Faraday rotation angle

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We investigate the Quantum Faraday Rotation starting from the photon self-energy in the presence of a constant magnetic field. The angle is calculated for a weak non degenerate limit for engage a discussion related to the constraints of the magnetic field constraints imposed by Planck. The origin of the Faraday angle is studied and is compared with classical limit.

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