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Loop Amplitudes Induced by Tensor Fermionic Current in Constant Homogeneous Electromagnetic Fields

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The non-diagonal correlator of vector and tensor fermionic currents is considered as the concrete example of the two-point one-loop amplitudes modified by a constant homogeneous magnetic field. The crossed-field limit of this correlator is found. The tensor current is a fermionic part of the Pauli Lagrangian relevant for the electromagnetic interaction of fermions through the anomalous magnetic moment. Under assumption that this interaction enters the effective QED Lagrangian, the contribution to the photon polarization operator linear in AMM is calculated.

Secondary track (number)

03

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