

# The propagator of a charged vector boson in the presence of an external magnetic field using the Ritus Eigenfunction method

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## Content

I will present the calculation of the propagator of a charged vector boson in the presence of an external magnetic field using the Ritus Eigenfunction method. Although this is not a novel result, the methodology used throughout the calculation is relevant in the sense that the calculation is done with a diagonalized equation of motion. This advantage allows a more direct interpretation of the energy and Landau levels present in the methodology and their physical scenarios. Moreover, I present the path from the propagator in the Ritus Eigenfunction method representation to the propagator in the Schwinger proper time parameter representation.

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