

# Worldline representation of the photon-dressed electron propagator

## Content

Recently, Ahmadiniaz et al. derived an elegant worldline path integral representation of the fermion propagator dressed with any number of photons in quantum electrodynamics. Its main features are the avoidance of long Dirac products and the unification of all Feynman diagrams into a compact master formula. This master formula comes in two versions, one based on worldline supersymmetry and the other one on a spin-orbit decomposition. We compare the efficiency of both formulas, and apply them to the calculation of selected helicity components.

## Summary

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