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# Strictly Calculate the Electron Mixing-loop Chain Propagator in SM

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Employing the electroweak standard model(SM), we analyzed and discussed the framework form of electron mixing-loop chain propagator and its renormalization in detail; then achieved the analytic count. Based on it we acquired the analytic solution of electron mixing-loop chain propagator which composed of serious of different physical loops. This study would offer certain academic reference to the discussion and applying about normal complex propagators in both theoretical analyzing and application.

## Summary

Keywords: Standard Model; mixing-loop chain propagator; renormalization.

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