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Mastering the effect of Fermionic Determinant Zeroes in Complex Langevin Simulations of Heavy-Dense QCD

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Zeroes in the fermionic determinant induce poles in the drift
of the Langevin equation. We here study their effect on Complex Langevin
simulations in an effective model related to QCD in the limit of heavy quarks
and large chemical potential. The latter was defined long ago by one of the authors and
used thereafter in various contexts.
We approach in this way a
quantitative understanding of the conditions for reliability
and define systematic errors for the results which could be extended to
realistic lattice simulations.

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