$$\Gamma_d = \Gamma_1 \oplus \Gamma_{\text{Wick}} \oplus \Gamma_2 \tag{1}$$

The figure illustrates the example trajectories of the ν-integral poles in Eq. (??) arising from the (i) nuclear propagators in T_3, (ii) photon propagator, and (iii) electron propagator, with sets labeled by $\mathcal{N}$, γ, and e, respectively.