

Diagrammatic Monte Carlo methods for non-equilibrium systems

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‘Diagrammatic’ or ‘continuous-time’ quantum Monte Carlo algorithms are computational methods based on a stochastic sampling of convergent perturbation series. We present some of these methods and their applications and focus on recently developed ‘bold-line’ algorithms for non-equilibrium (Keldysh) diagrammatics that allow numerically exact access to the Kondo regime of interacting quantum impurities.