

Renormalization of the spin-boson model

Thursday, November 6, 2025 11:10 AM (45 minutes)

In this talk I will present new results concerning the well-posedness of the spin-boson dynamics for arbitrarily singular form factors. The Hamiltonian operator is obtained through a self-energy and wave function renormalization procedure, and it lies on a non-Fock representation of the canonical commutation relations. This renormalization is non-trivial, thus overcoming the problem of triviality in Fock representation renormalization schemes.

Based on a joint work with B. Hinrichs and J. Valentin Martín

Presenter: FALCONI, Marco (Université de Milan)