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**Nonequilibrium Kondo model: Real-time RG study of crossover from weak to strong coupling**

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We analyze the nonequilibrium Kondo model at finite voltage and temperature by using a new formulation [1] of the real-time renormalization group [2] with the Laplace variable as the flow parameter. We evaluate the energy-dependent spin relaxation rate and nonlinear conductance, and derive an approximate form for the universal line shape for the latter in the whole crossover regime from weak to strong coupling (that is, from high to low energy scales). The results are shown to agree well with exact methods and the numerical renormalization group in equilibrium, Fermi liquid theory, weak-coupling expansions, and recent experiments [3].

References:

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