

Abstract Submitted
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Transport spectroscopy of Kondo quantum dots coupled by RKKY interaction L.I. GLAZMAN, University of Minnesota, M.G. VAVILOV, Yale University — We develop the theory of conductance of a quantum dot which carries a spin and is coupled via RKKY interaction to another spin-carrying quantum dot. The found dependence of the differential conductance on bias and magnetic field at fixed RKKY interaction strength may allow one to distinguish between the possible ground states of the system. Transitions between the ground states are achieved by tuning the RKKY interaction, and the nature of these transitions can be extracted from the temperature dependence of the linear conductance.

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