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A Metal-Insulator transition in the Kondo Chain

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Abstract:

Several Majorana zero energy bound states (MZBS) located in a superconducting Coulomb box may interact to lead electrons in a manner resembling a local magnetic moment. In case when the number MZBS exceeds two the scattering becomes inelastic; this constitutes the essence of Topological Kondo effect (TKE). The distinct feature of TKE is quantum criticality. In this talk I will discuss the physics of TKE and a possible influence of the quasiparticle poisoning which, as I argue, will not influence the critical behavior.