

# Subgap current through the strongly correlated quantum dot hybridized with the normal and superconducting leads

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We investigate the nonequilibrium transport through the strongly correlated quantum dot embedded between one metallic and one superconducting leads. For small voltage  $|V| \leq \Delta/e$  applied across the junction the charge flow is transmitted by the mechanism of Andreev reflections. Such anomalous current is sensitive to the proximity effect (spread onto the quantum dot from the superconducting electrode) and it is strongly dependent on the Coulomb interactions which prevent even occupancy of the quantum dot. We shall discuss their interplay, in particular analyzing the influence of particle-hole splitting on the Kondo resonance signified in the zero-bias differential conductance.

9.7 cm

13.4 cm

## Subject category :

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