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**Theory of transport through molecular magnets**

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Quantum transport through single molecular magnets (SMM) is starting to become a new exciting field in molecular spin electronics. Recent experiments [1,2] have shown that magnetic excitations can be identified in transport measurements and that NDC effects and complete current suppression can be explained by charge dependent anisotropies. Recent theoretical investigations [3,4,5] are presented which demonstrate fingerprints of quantum tunneling of magnetization (QTM). For weak tunneling, the violation of spin-selection rules leads to the occurence of fake resonances with temperature-dependent position [3]. For strongtunneling, it is show that a pseudo spin-1/2 Kondo effect is induced by QTM. If the Kondo temperature $T_K$ is smaller than the distance to excited magnetic states, selection rules depending on spin and symmetry of the SMM are derived for the Kondo effect to occur [4]. If $T_K$ exceeds the anisotropy barrier, it is shown that a reentrant Kondo effect can be induced by application of a longitudinal magnetic field for SMM with half-integer or integer spin [5]. This effect can be used for transport spectroscopy of the various anisotropies characterizing a SMM.

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