

Seminář odd. 26

Tenkých vrstev a nanostruktur

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TÉMA

Physics of magnetic adsorbates

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Magnetic adsorbates on metals can be studied by driving electron currents through them. The scanning tunneling microscope (STM) is an excellent tool to do so. This has permitted to reveal the signature of the Kondo effect in single adsorbates, the signature of magnetic excitations, their properties of spin filtering, etc. In this talk I will present recent results on modelling the Kondo effect in the presence of excitations [1] and in both, the tunneling and high-conductance regime. I will also address spin-filtering effect in supposedly good molecular spin filters and show that inelastic and thermal effects can have very detrimental consequences on the spin filtering properties of molecular devices [2].

[1] R. Korytár, N. Lorente and J.-P. Gauyacq, PRB 85, 125434 (2012)

[2] P. Abufager, R. Robles and N. Lorente J. Phys. Chem C 119, 12119 (2015)

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