

# POZVÁNKA

na seminář oddělení 15 Fyzikálního ústavu AV ČR, v.v.i.

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Seminář se koná

**ve pátek 17. května 2013 v 10:00**

v zasedací místnosti budovy A Fyzikálního ústavu, Cukrovarnická 10,  
Praha 6.

Na programu je přednáška

## **Spin-orbit coupling fields in hybrid ferromagnet/semiconductor heterostructures**

kterou prosloví

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### Abstrakt

The microscopic structure of spin-orbit fields at interfaces such as Fe/GaAs is uncovered from first principles. A symmetry based method allows obtaining the spin-orbit fields — both their magnitude and orientation — for a generic Bloch state, from the electronic band structure for any in-plane magnetization orientation. It is demonstrated that the spin-orbit fields depend not only on the electric field across the interface, but also surprisingly strongly on the Fe magnetization orientation. The possible formation of helical interface states due to strong spin-orbit fields at nonmagnetic interfaces is also briefly discussed.