

POZVÁNKA

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

Seminář se koná

v pátek 15. července 2011 v 10:00

v zasedací místnosti budovy A (1. patro vedle knihovny)
Fyzikálního ústavu, Cukrovarnická 10, Praha 6.

Na programu je přednáška

Rare-Earth Nitrides: Intrinsic Ferromagnetic Semiconductors

kterou prosloví

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Abstrakt

The rare-earth series, across which the atomic 4f orbitals are filled, form ionic mononitrides in the simple NaCl structure. Many have been recognised for fifty years as ferromagnetic in their ground state, but it is only recently that the growth of sufficiently ordered material has permitted their electronic state to be confidently established. We have now grown both epitaxial and polycrystalline films of almost half of the series and investigated their magnetic and electronic properties with a wide range of measurements. The majority of those are narrow-gap semiconductors both above and below their Curie temperature. They have a number of characteristics that offer promise for spintronics structures.