

zve všechny zájemce na ústavní seminář,
na kterém promluví

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na téma

**Graphene under uniaxial strain:
A Raman study**

Seminář se koná **v pátek 10. prosince 2010**
od 10:30 hodin

v budově ÚFCH JH – v Brdičkově posluchárně
(Praha 8, Dolejškova 3).

Abstrakt:

The presented work summarizes various aspects of uniaxial deformation in single- and bilayer graphene studied by means of Raman spectroscopy. Graphene flakes were subjected to cyclic uniaxial loading (tension - compression) and the evolution of the Raman G, G* and 2D bands was monitored at strain levels up to 1.5%. The meaning and significance of the shift rates, changes in width and/or splitting will be discussed. As will be shown, the flake geometry and pre-strain strongly influence the deformation behavior of the individual flakes, which is then reflected in the Raman shift rates and slopes. The analysis of critical buckling strains of the graphene flakes will provide a basic insight into their compressive behavior, which follows the Euler regime. Additionally, a novel, more accurate concept of the 2D Raman band origin will be proposed and accompanied with a comparison of experimental and simulated Raman spectra.

Těšíme se na Vaši účast. Hosté jsou vítáni.

