

Univerzita Karlova v Praze
Matematicko-fyzikální fakulta
katedra fyziky nízkých teplot

Pozvánka

na seminář katedry fyziky nízkých teplot MFF UK,

který se koná v pondělí dne 30.11.2015 ve 14 hodin v Areálu MFU Troja, ul. V Holešovičkách 2, budova C – kryogenní pavilon, 1. patro, místnost C126 (seminární místnost KFNT).*

Na semináři vystoupí Dr. Wolfgang Anwand, Helmholtz-Zentrum Dresden-Rossendorf s přednáškou „**User facilities for positron annihilation spectroscopy at Helmholtz-Zentrum Dresden-Rossendorf**“.

Abstrakt:

User facilities for Positron Annihilation Spectroscopy (PAS) at Helmholtz-Zentrum Dresden-Rossendorf (HZDR)

Wolfgang Anwand

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Three user dedicated facilities of PAS are built at the Institute of Radiation Physics of HZDR. The first equipment, a mono-energetic slow positron beam with ^{22}Na as positron source, is mainly used for depth dependent Doppler broadening spectroscopy of defects in solids. The other two facilities are driven in connection with a superconducting electron linear accelerator ELBE (ELectron Linac for beams with high Brilliance and low Emittance), where the positrons are created by bremsstrahlung and pair production: the γ -induced positron annihilation spectroscopy (GiPS) and the pulsed mono-energetic positron beam (MePS).

After an explanation of the fundamentals of PAS, the talk will present an introduction in the set-up and functionality of these three facilities. On the basis of concrete examples the usefulness of the facilities for the investigation of open-volume defects of small size and low concentration in solids will be demonstrated.

At the end of the presentation, a short outline of the procedure for application of PAS beam time will be given.

* Metro „C“, ze stanice Nádraží Holešovice autobus 201 do zastávky „Kuchyňka“ (zastávka na znamení).