



ČESKÉ VYSOKÉ UČENÍ TECHNICKÉ V PRAZE
ÚSTAV TECHNICKÉ A EXPERIMENTÁLNÍ FYZIKY

128 00 Praha 2 - Albertov, Horská 3a/22
tel.: 22435-9391, 9290; fax: 22435-9392



POZVÁNKA

na 257. seminář ÚTEF ČVUT
pod záštitou Československé sekce NPSS IEEE

Applications of the Timepix detector for ion beam therapy purposes

Bernadette Hartmann

Universitätsklinikum Heidelberg, Germany
German Cancer Research Center

Abstract: Hybrid semiconductor pixel detectors enable detection and tracking of single ions and are of great interest for ion beam therapy purposes in order to attend the needs of carbon ion beam therapy and further enhance its accuracy. Researchers of the Heidelberg University Hospital collaborate with ÚTEF ČVUT to carry out precise studies such as characterization and visualization of spatial distribution of fragmentation and reaction products namely with the per-pixel energy sensitive Timepix device. Joint experiments are performed at the proton ion synchrotron at the Heidelberg Ion-Beam Therapy Center (HIT) in Germany, which is a hospital based facility for proton and carbon ion beam therapy. In the seminar, I will present a novel approach to measure the fragmentation of therapeutic 270 MeV/u carbon ion beams made possible with the Timepix detector.

Seminář se bude konat v úterý 15. ledna 2013 ve 14 hodin
v zasedací místnosti ÚTEF ČVUT, Praha 2 - Albertov, Horská 3a/22

Ing. František Krejčí
tajemník semináře

Ing. Stanislav Pospíšil, DrSc.
ředitel

Doc. Ing. Carlos Granja, Ph.D.
předseda NPSS, ČS IEEE

NUCLEAR & PLASMA SCIENCES SOCIETY CHAPTER

IEEE Czechoslovakia Section
<http://www.ieee.cz/en/nps>

