

Biomedicínské centrum Lékařské fakulty v Plzni Univerzity Karlovy v Praze

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odborný seminář Výzkumného programu 2

ve spolupráci se super-laserovým centrem ELI-Beamlines Fyzikálního ústavu
Akademie věd České republiky

Datum konání: 19. června 2014, 14:00 – 15:30 hod.

Místo konání: Posluchárna PAV B
Pavlovův pavilon
Lidická 1, 301 66 Plzeň

Program:

Dr. Valentina Scuderi, Ph.D. *Hadron Therapy and Its Importance in Medicine*

Abstrakt:

Hadron therapy is a radiotherapy technique that uses a collimated beam of ions for the sterilization of tumour cells. High energy beams of charged particles offer, indeed, significant advantages for treatment of deep-seated local tumours in comparison to megavolt photon therapy. The first Italian proton therapy treatment facility (CATANA) started its operation in 2001. Here a 62 MeV proton beam, accelerated by a superconducting cyclotron, is used for the irradiation of eye melanomas. Since 2001 around 400 patients have been successful treated and good results have been obtained.

In this talk an overview of the hadron therapy technique, particularly for the proton case, together with a discussion on the dosimetry and clinical aspect will be given; as an example of proton therapy treatment facility the CATANA facility will be also described. Moreover, future perspectives on the possible clinical applications of laser-driven proton beams in future hadron therapy facilities will be discussed.

Přednáška bude přednesena v angličtině, program budou moderovat
doc. MUDr. Milena Králíčková, Ph.D. a Ing. Jiří Polívka.

Účast je bezplatná, registrovat se můžete na adrese zdenka.valdhauserova@lfp.cuni.cz