

PHYSICAL COLLOQUIUM
INVITATION

Monday, 10.04.2017, 4.15 p.m., W2-1-148

speaks

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about

Image-guided (adaptive) radiation therapy

using magnetic resonance imaging

The optimal use of imaging before and during radiation delivery to adapt the treatment of the individual patient to morphological and physiological changes is the aim of image-guided adaptive radiation therapy. While state-of-the-art medical linear accelerators have integrated systems for cone-beam computed tomography, recently the first devices have become available that allow magnetic resonance imaging (MRI) during radiation treatment. The excellent soft tissue contrast of MRI and the possibility to image physiological processes make it an ideal candidate to monitor and react to changes that occur over the course of therapy.

Designs and prototypes of devices for MRI-guided radiation therapy will be presented and their potential and limitations, chances and challenges will be discussed.

All interested persons are cordially invited.

Sgd. Prof. Björn Poppe