FAKULTÄT für PHYSIK LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN/GARCHING

PHYSIK-DEPARTMENT TECHNISCHE UNIVERSITÄT MÜNCHEN MÜNCHEN/GARCHING

MLL-KOLLOQUIUM

Donnerstag, 10.01.2019, 16^{15} Uhr

Hörsaal der LMU in Garching, Am Coulombwall 1 Treffen zum gemeinsamen Kaffee 16 Uhr

Prof. Antony John Lomax

(Paul-Scherrer-Institut, Villigen/Switzerland)

Questioning the unquestionable in proton therapy: Are range uncertainty and RBE overrated?

Particle therapy with protons or heavier ions is, in principle, a very precise form of treatment, or put another way, a 'sharp knife' for treating cancer. But what if this knife is not as sharp as we think, or is somehow distorted? Under the more familiar terms of 'range uncertainty' and 'relative biological effectiveness', these are the cries that are currently impossible to ignore when particle therapy is discussed in the literature or at conferences. However, are these issues really as big a problem as is sometimes made out? In this presentation, we will take an irreverent and (hopefully) provocative look at both these issues from a clinical and practical point of view and ask the unaskable question - Are range uncertainty and RBE overrated?

gez. Peter Thirolf Tel. 289-14064 gez. Norbert Kaiser Tel. 289-12367