Joint DESY and University of Hamburg Accelerator Physics Seminar

Friday, 17.01.2020

(10:00 in Room 459/30b)

The Laser–hybrid Accelerator for Radiobiological Applications (LhARA)

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Abstract

The "Laser–hybrid Accelerator for Radiobiological Applications", LhARA, is conceived as a novel, uniquely flexible facility dedicated to the study of radiobiology. The technologies that will be demonstrated in LhARA have the potential to allow particle–beam therapy to be delivered in a completely new regime, combining a variety of ion species in a single treatment fraction and exploiting ultra–high dose rates. LhARA will be a hybrid accelerator system in which laser interactions drive the creation of a large flux of protons or light ions that are captured using a plasma lens and formed into a beam. I will describe the motivation for LhARA, present the status of its development and summarise the programme upon which the LhARA consortium has embarked to drive a step–change in clinical capability.

NOTE THE UNUSUAL DATE AND TIME

W.Hillert, (Univ. HH), I.Agapov (MPY) and M.Vogt (MFL).