Joint DESY and University of Hamburg Accelerator Physics Seminar

Tuesday, 24.09.2019

(16:00 in Room 459/30b)

Modeling and optimization of accelerators with OCELOT

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Abstract

Users beam-time at modern electron-based light sources is an extremely valuable commodity. Automatic optimization, free- and model-dependent, is faster and more advantageous compared to manual tuning. Calculation of electron and photon beam properties are crucial for machine operation and development. The multiphysics software toolkit OCELOT is used in the computation of both electron and photon beam properties. In particular, it deals both with modelling and optimization of accelerators, which are –as discussed above- highly important research directions for the overall efficiency of light sources. This talk will review recent progress on the development of OCELOT and its use for simulation and optimization of accelerators.

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