Joint DESY and University of Hamburg Accelerator Physics Seminar

Tuesday, November 17-th, 2009

(16:00 in Room 459/30b)

Algorithmically Efficient Ray Tracing for the Simulation of Wall Heating in Particle Accelerator Structures

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Abstract

This seminar session suggests a concurrent ray tracing algorithm for rotationally symmetric problems improving central parts from $O(\log(n))$ to $O(1)$ time complexity. Further, an implementation is presented, as well as its application to the problem of wall heating caused by high frequency wake fields.

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