Joint DESY and University of Hamburg Accelerator Physics Seminar

Wednesday, November 10, 2004

(15:30 in Room 459/30b)

Characterizing the Impedance and Mitigating Instabilities at the Advanced Photon Source

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Abstract

Over its nearly ten years of operation, performance enhancements of the Advanced Photon Source continue to be made, most notably, an emittance reduction of over a factor of three, topup operation, and orbit stability on the order of microns. During this same period, the impedance evolved, in particular, with the installation of small- aperture ID chambers. I will report on our experiences with single bunch and multibunch instabilities, as well as describe the tools we have developed for accurately characterizing the ring impedance. I will also discuss goals and plans for raising the instability thresholds.

NOTE THE UNUSUAL DATE AND TIME

D.P.Barber (MPY), J.Rossbach (Univ. HH) and M.Vogt (MPY).

Visit our web site at http://www-mpy.desy.de/AccPhySemDESY/