Joint DESY and University of Hamburg Accelerator Physics Seminar

Monday, July 10, 2006

(16:00 in Room 459/30b)

Experiments on deflection of charged particles using silicon crystals at Hiroshima University and KEK, Japan

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Abstract

Experiments on deflection of electron and proton beams were performed at the Hiroshima University and KEK — High Energy Accelerator Research Organization respectively. Electrons with an energy of 150 MeV were deflected by the <100> axis of a silicon crystal. The maximum deflection angle was 0.2 mrad. The dependence of the beam deflection on the beam divergence was studied in this experiment. Another experiment on deflection of a 12 GeV proton beam using the (111) plane was done at the Proton Synchrotron Facilities, KEK. The crystal efficiency reached 30% which was in good agreement with Monte–Carlo simulations. The latest results of these experiments will be presented.

NOTE THE UNUSUAL DATE

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

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