

COMPARISON OF SYNRAD3D PHOTON-TRACKING MODEL FOR SHIELDED PICKUP MEASUREMENTS AT CESR TA

LAURA BOON, JIM CRITTENDEN, KATHERINE HARKAY

Electron cloud detectors called shielded pickups have been placed in the Cornell Electron Storage Ring Test Accelerator (CesrTA). Results from these detectors at 15E, 15W, and 5E will be presented for both electron and positron beams, with comparisons to photon absorption from SYNRAD3D. Our current understanding of radiation and electron cloud production is fairly well understood, the work presented here will address the simulation of reflected photons. Currently SYNRAD3D simulates the reflection of synchrotron radiation based on data from Berkely's Center for X-Ray Optics. Presented here is the comparison between simulation and data taken at CesrTA.