The Beams and Applications Seminar Series

An Introduction to Beam Instrumentation for the ILC

Dr. Marc Ross

Stanford Linear Accelerator Center

Bldg. 401, rm B2100
Friday, April 7, 1:30pm

Host: K.-J. Kim, ASD

Instrumentation for the ILC should have improved accuracy and intrinsic stability, extending the state of the art beyond present pulsed machines. RD at the ILC test facilities, ATF (KEK) and TTF (DESY), is underway in order to demonstrate beam position and beam profile monitors with sub-micron accuracy. In this talk, I will present an overview of cavity beam position monitor studies, using copper cavities and using superconducting RF accelerator cavity higher-order modes. I will also present recent work on laser-based transverse beam scanners and deflecting structure longitudinal beam size monitors.

For more information visit

http://www.aps.anl.gov/asd/physics/Seminars.html

Visitors from off-site please contact Chun-xi Wang (wangcx@aps.anl.gov, 630-252-4968) to arrange for a gate pass.

This ANL seminar series is a CARA activity and focuses on the physics, technology and applications of particle and photon beams. It is sponsored jointly by the ASD Division, the AWA group of the HEP Division, and the ATLAS group of the PHY Division.