

ACCELERATOR SEMINAR

“Recent Results of the ILC Cavities and the Proto-type 2-cell Injector Cavity for cERL at KEK”

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The superconducting 9-cell cavity (1.3 GHz) for ILC is under development at KEK. Two cavities, MHI-012 and MHI-013, achieved the ILC performance specification at KEK-STF in December 2010. In case of MHI-012, the accelerating gradient exceeded 40 MV/m. It is the first demonstration of such a gradient in a 9-cell cavity in Japan. The history of trials to achieve good performance and vertical test results at KEK-STF will be presented. Development of the superconducting injector linac for the compact ERL has been continuing at KEK. The cryomodule including three two-cell SC cavities. Two prototype two-cell cavities were fabricated, and the vertical tests without HOM pick-up probe were carried out after the standard surface preparation at KEK-STF. The target operation gradient is 15 MV/m CW in cryomodule. The result of vertical test of proto-type cavity #2 will be presented.

Thursday, February 24, 2011

11:00 a.m.

CEBAF Center, Room F224/225

Coffee before seminar beginning at 10:45 a.m.