

LINAC R&D FOR THE ILC TECHNICAL DESIGN REPORT

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Abstract

The International Linear Collider (ILC) Technical Design Report (TDR) is scheduled for publication in 2012. The TDR will include an updated ILC baseline technical design description, results from critical R&D programs in support of key parameter choices, and one or more models for a Project Implementation Plan with an associated value estimate. The focus of linac R&D is to: 1) achieve the specified superconducting rf cavity accelerating gradient of 35 MV/m with a corresponding production yield, 2) design and test cryomodule assemblies that include "plug-compatible" sub-components with specified interfaces, and 3) demonstrate system performance with nominal ILC high intensity beams. In keeping with the international nature of the project, R&D is underway at ILC partner institutions with results and infrastructure that are shared throughout the project effort. This paper describes the technical challenges to be addressed and summarizes ongoing activities and plans.

**CONTRIBUTION NOT
RECEIVED**