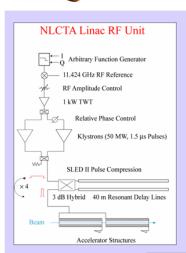
NLCTA



Commissioned in 1997
300 MeV beam, single pulse
and multi-bunch capability
Around-the-clock RF
operation
Energy compensation
5+4 X-band klystrons
Present incarnation as RF
test facility to support
aggressive structure R&D
program
34 structures tested



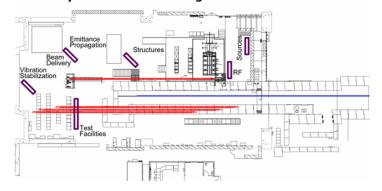




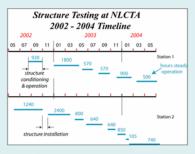


Beam Loading Compensation RF Electric Field Envelope at Input End (MV/m) **Images from Beam** 40 **Loading Profile** RF Ramp **Monitor in NLCTA** 20 200 100 Time (ns) Before beam loading compensation Energy Gain of a Test Charge (MeV) 100 80 RF Ramp 60 40 Loading 20 100 200 Test Charge Injection Time (ns) With RF Ramp

Layout of NLCTA showing ITRP Poster Stations



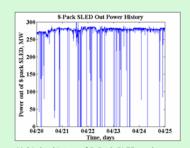
NLCTA



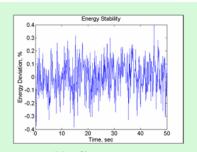
Of the 20 X-band structures shown on this diagram, 8 are now installed. 5 of these meet the specified trip rate at 65 MeV/m.

The 20 included 1 standing wave and 1 CERN-produced CLIC structure.

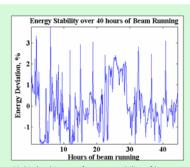
Typical installation time is 10 days with 8 weeks of operation, including the initial conditioning.



Multi-day history of 8-Pack SLED peak power



Energy Stability of beam in NLCTA extraction line. RMS = 0.13%



Multi-day history of energy stability of beam in NLCTA extraction line