

## Tour of NLCTA (Next Linear Collider Test Accelerator)

NLCTA is a self-contained accelerator facility located on the SLAC site that uses state-of-the-art photoinjector and X-band technology, in combination with solid-state lasers, to produce electron beams up to 200 MeV in energy. Students working at NLCTA have a unique opportunity to engage in hands-on operation of a fully functioning accelerator and to propose and carry out experiments using relativistic electron beams and infrared lasers. Current experiments include:

- Direct acceleration of electrons using lasers and dielectric microstructures
- Use of lasers and magnets to produce higher harmonic temporal bunching
- Development and testing of novel high-power microwave structures
- Development of high-frequency (X-band) microwave accelerator structures



Tour Time: Tues April 5, 1:50– 3:15 PM, also includes the SLAC Klystron Gallery and the newly built Accelerator Control Room.