# LiC Detector Toy 2.0

## Vienna Fast Simulation Tool for Charged Tracks

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## Abstract

The "LiC Detector Toy" (LDT) software tool has been designed and developed in the Vienna ILC Project Group for detector design studies, aiming at investigating the resolution of reconstructed track parameters for the purpose of comparing and optimizing detector set-ups. It consists of a simplified simulation of the detector measurements, based on a helix track model and taking into account multiple scattering, followed by full single track reconstruction using the Kalman filter. The software runs under MATLAB and OCTAVE, with an integrated GUI available under MATLAB, and may be installed on a desktop or laptop PC. It can easily be used as a black-box tool by non-experts, but can also be adapted to meet individual needs.

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**Download:** LDT can be downloaded at

http://wwwhephy.oeaw.ac.at/p3w/ilc/lictoy/

→ LDTsource_20.zip
→ UserGuide_20.pdf