

## Tests of a Prototype of the Silicon Tracking System of the ILD Concept

The International Large Detector (ILD) is one of the proposed detector concepts for the future International Linear Collider (ILC). Its central tracking system consists of a TPC combined with silicon strip sensors. In the barrel region, the silicon tracking system is composed of three double layers of silicon strip detector modules, two between vertex detector and TPC, the Silicon Internal Tracker (SIT), and one layer just outside the TPC, the Silicon External Tracker (SET). This design drastically improves the momentum resolution of charged particles and increases the linking efficiencies of the TPC with the vertex detector and the electromagnetic calorimeter (ECAL).

In November 2009 a first test beam including both, the Large Prototype TPC (LPTPC) and a first prototype of the silicon modules was performed at DESY, using an electron beam with a momentum of 5.6 GeV/c. The LPTPC is designed to fit into a superconducting magnet which can provide a magnetic field of up to 1.25 Tesla. Due to the limited space between the TPC and the surrounding magnet only one double layer of silicon strip modules on both sides of the TPC could be installed. This poster presents first results from the data analysis and discusses possible future steps.

**Summary (Additional text describing your work. Can be pasted here or give an URL to a PDF document):**

[http://wwwhephy.oeaw.ac.at/u3w/s/shaensel/www/Haensel\\_VCI\\_MoreInformation.pdf](http://wwwhephy.oeaw.ac.at/u3w/s/shaensel/www/Haensel_VCI_MoreInformation.pdf)

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