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## Study of a Large Prototype TPC using Micro-Pattern Gas Detectors

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In the last decade, R&D of detectors for the future International Linear Collider (ILC) has been carried out by the community. The International Large Detector (ILD) is one detector concept at the ILC where calorimetry and tracking systems are combined. The tracking system consists of a Si vertex detector and forward tracking disks coupled to a large volume Time Projection Chamber (TPC).

Within the framework of the LC-TPC collaboration, a Large Prototype (LP) TPC has been built as a demonstrator. Its endplate is able to contain up to seven identical Micro-Pattern Gas Detectors (MPGD) modules. Recently, the LP has been equipped with resistive anode Micromegas (MM) or Gas electron Multiplier (GEM) modules. Both the MM and GEM technologies have been studied with a 5 GeV electron beam in a 1 Tesla magnet.

After introducing the LP, the current status, recent results (drift velocity, field distortions, ion gate and spatial resolution measurements) as well as future plans of the LC-TPC R&D with MM and GEM will be presented.

### Summary

on behalf of the LC-TPC collaboration

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