

The most urgent problems to be addressed by the LCTPC-collaboration

- 1) Develop a simulation program that can reproduce the field distortions seen from the measurements.
- 2) Further development of Marlin TPC and better understanding of the data already taken.
- 3) Use this simulation program to design a field shaping system to minimize the distortions.
- 4) Design and test a grid system with high enough transparency for electrons.
- 5) Perform simulation of physics events to understand requirements on two track/two hit resolutions and develop codes to analyse events from detailed simulations and LP-data.
- 6) Investigate the possibilities to get access to a 4-5T magnet.
- 7) Address the problem of power pulsing.
- 8) Define what criteria should be used to make a technology choice.
- 9) Find an external position detector with sufficient resolution, get it working and install it. Alternatively give Alain green light to go ahead with an application to build a $10 \times 10 \text{ cm}^2$ Si detector (has to happen before mid July).

Criteria for technology choice:

- 1) Reliability in performance
- 2) Momentum resolution
- 3) Point resolution in bending plane and z-direction
- 4) dE/dx resolution
- 5) Two track resolution in bending plane and z-direction (definition has to be specified)