Detector issues

(in addition to those covered under MDI)

Topics for collaboration:

CLIC detector work at CERN is resuming, good reason for collaboration with ILC community.

1) Define a CLIC detector concept at 3 TeV.
   (update of 2004 CLIC Study) based on ILC detector concepts.

2) Detector simulations
   - Simulation tools to be used by ILC and CLIC (WWS software panel)
   - Validation ILC detector options for CLIC at high energy, different time structure and different backgrounds
   - 1 TeV benchmark studies to provide overlap
   - compare performance using defined benchmark processes (e.g. WW/ZZ separation)

Detectors cont.

3) EUDET /DEVDET (infrastructure for LC detector R&D, with associated non-EU groups)
   - microelectronic tools
   - 3D interconnect technologies (for integrated solid state detectors)
   - simulation and reconstruction tools
   - combined test with magnet and LC sub-detectors

4) TPC
   - TPC performance at high energies (>500GeV).
   - TPC read out electronics

5) Calorimetry
   - Dual Readout Calorimetry (feasible at LC?)

6) General
   - increased CLIC participation in future ECFA workshops (2008 Warsaw) on LC detectors