

# 2nd Linear Collider Testbeam **Workshop**



## Status of Preparation

Roman Pöschl  
LAL Orsay



Linear Collider Workshop LCWA09 Albuquerque NM Sept./Oct. 2009

## Place and Venue

- LAL Orsay ~ 15km southwest of Paris
- Main Auditorium and two seminar rooms at LAL booked for whole week 2.11.09 – 6.11.09  
Possibility for parallel sessions and satellite meetings  
Webcast from all the rooms possible. Main auditorium is excellently equipped for that.
- Propose to have only plenary sessions.
- Workshop Diner planned for 3/11/09 (**Wine Museum at Paris**)
- Conference Fee 150 Euro
- Registration has been opened by 1/7/09

### **Workshop Webpage**

**<http://events.lal.in2p3.fr/conferences/LCTW09/>**

Two steps: Pre-registration

Final registration once the payment is made

## Idea/Charge of the Workshop

- Dates and Location: 3.11.09 – 5.11.09 at LAL Orsay
- Successor of 1<sup>st</sup> workshop of this kind at FNAL in Jan. 07  
<https://conferences.fnal.gov/idtb07/>

Three year rhythm looks appropriate

- Orsay workshop allows for reviewing achievements/developments since FNAL workshop
- Help to ILC Detector R&D panel to monitor and direct detector R&D activities  
“Change of Landscape” after the LOI's
- Sharpen the view of community to identify synergies in R&D programs (particularly) testbeam efforts  
Common tools, common reservation of testbeam areas, common application for beam time
- “Remind” Testbeam operators of our needs
- **The workshop should render a document where the testbeam plans are listed and explained**  
Such a document would underline the wealth of the activities and facilitate the acquiring of funding for the testbeam efforts or help to save money where common interests are identified

## Idea/Charge of the Workshop cont'd

- Testbeams are the best opportunity to show our readiness to go for the ILC  
At least large scale testbeams should be considered as “mini” ILC experiments

### **A Matter of Concern**

- **So far only(!) 16 people have registered**  
**Clearly a sub-critical mass for a workshop**
- **Problems with registration procedure (just recently setup by CNRS)**
- **No interest?????**
- **WS not needed????**
- **What is your opinion/experience?**

Well I think yes ... The workshop is tailored to

- Help to structure the detector R&D for the ILC
- Obtain a view on the priorities in detector R&D in the common years and how to achieve these in test beam programs
- allow to create a coherent picture of the R&D
- identify items for collaboration (even beyond subdetector systems)

# Organisation Committees

**Programme Committee:** F. Sefkow (DESY), J. Yu (UTA), V. Vrba (FZU Prague),  
K. Kawagoe (Kobe University)  
V. Boudry (LLR Palaiseau), J. Hauptman (Iowa University)  
Yulan Li (Tsinghua University), R. Lipton (FNAL)  
M. Vos (IFIC Valencia), T. Nelson (SLAC)  
F. Gaede (DESY), N. Graf (SLAC), M. Wing (UCL London)

NB.: Crossviews are “allowed” and desired

**Scientific Advisory Board:** Sakue Yamada (Tokyo University, KEK), H. Yamamoto (Tohoku University)  
J. Brau (University of Oregon), F. Richard (LAL), M. Demerteau (FNAL)  
Young-Kee Kim (FNAL), S. Bertolucci (CERN), J. Mnich (DESY),  
D. MacFarlane (SLAC), K. Nishikawa (KEK)

The SAB is ready to give advice and to watch the balance of the meeting programme

**Local Organisation Committee:** R.P. (Chair)  
P. Doublet (Scientific Secretary)  
M. Faucci-Gianelli (Scientific Secretary)  
P. Chemali (Workshop Secretary)  
V. Brouillard (Workshop Secretary)  
G. Dreneau (Webcast, technical questions)

## A walk through the agenda - 3/11/09

- Workshop between: 3.11.09 1000h CET – 5.11.09 1415h CET

### 1) Opening Session

Agenda as given in the talk was basically approved.

- Talk on services which have been provided by J. Yu
- Talk on achievements (publication, main results etc.)

### 2) Calorimetry

### 3) Gaseous Tracking

## A walk through the agenda - 4/11/09

4) Silicon tracking

5) Testbeam facilities

The tentative sites have been identified and representants from these sites will be contacted by

Vaclav, Felix, Jae and Kiyotomo.

These sites are: Beijing, CERN, DESY, FNAL, J-Parc, KEK, Protvino, SLAC

Smaller sites in Europe?

6) DAQ and Software

Interfaces, Synergies and Infrastructure

## 7) Resources and Infrastructure for future Testbeams

- The talk on 'Human and Funding resources for test beams' may comprise a list of the available man power to conduct the testbeam program as well as an idea about the funding resources available, the latter may comprise an overview on the programs in which the programs are embedded.
- Connected to the last point the ideas for the European program in the FP7 framework will be presented. As one of the leading persons of this program is

### **i) Establishment of ILC test beam areas**

### ii) Combined test beams



## A walk through the agenda II

### 3. Session: Testbeam Facilities

Charge to Felix, Jae, Vaclav and Kawagoe to identify speakers and make sure that representatives participate at workshop

Some sites are obvious, don't forget smaller sites

(E.g. in Europe PSI, Bonn, Protvino

US: JLAB)

Smaller sites might be combined in one talk

(Tentative) Topics to be addressed:

- General features of beam lines
- What can be offered to best support ILC Detector R&D in terms of beam structure
- Possibility to establish 'ILC beam lines'

## A walk through the agenda III

### 3.-5. Session: Plans for sub-detectors

- Content of session
  - e.g. Calorimetry
    - CALICE (including DECAL) plans, Crystal Calorimeter plans
    - SID Ecal plans
    - Don't forget FCAL!!!!

Gaseous and Silicon Tracking → following the overview given at first preatorial meeting

### 6. Session: DAQ and Software

- DAQ: How much DAQ in detector specific parts?
  - Interplay between different sub-detectors
  - Input to Matthew needed
- Software: Interface between online and offline
  - Requires communication among Frank, Norman and Matthew (et al.) prior to the meeting
- Requires integration of testbeam needs into Icio et al.
  - Even more when 'common' ILC testbeam infrastructures are established
- Data processing and management

## A walk through the agenda IV

### 7. Session: Combined test beams

- Would like to rename session to 'Resources and Infrastructure for Future Testbeams'
- Most important session w.r.t. 'Structuring the ILC testbeam efforts'
- Overview on funding and (human) resources
- How to establish a ILC testbeam areas at sites
  - How many would we need?
  - What components do they need to feature (Magnets, Triggers, Particle ID etc.)
  - Sharing of beamlines be different efforts (even if not combined)
- Monitoring system for testbeam efforts
  - Once a year a general meeting (if face to face connected to one of the LC Workshops)
- What can be combined when?
- How can we synchronise different DAQ systems
- Common 'beamline' and detector software

I prefer that the chair of the R&D panel or the Research director convene this session

## Preparatorial Meetings

- 1<sup>st</sup> Meeting 26/5/09 (today) – Overview on R&D activities and testbeam needs
- 2<sup>nd</sup> Meeting (Beginning of July)  
First agenda skeleton – Identification of session convenors  
contact of speakers  
Overview on Software and DAQ in different experiments
- 3<sup>rd</sup> Meeting (Face-to-Face) @ ALCPG in Albuquerque  
Fixing the agenda
- 4<sup>th</sup> Meeting ~Two weeks before the workshop  
Discussion of Open issues  
Editors/Authors for workshop document