A USER’S PERSPECTIVE ON THE LINEAR COLLIDER

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• SLUO “Coordinator of Committees”
• 13-year veteran SLAC user
• overseas user
• not supported by DoE or NSF!

Her Majesty’s Govt. Health Warning:
This product may affect your health
EXCITING PAST YEAR FOR LC

March 2001: TESLA TDR launched

July 2001: Snowmass: 1200 people (200 non-US)

ECFA, ACFA, (Sept. 01) HEPAP Sub-panel (Jan. 02) reports:
   next machine → Linear Collider

Jan. 2002: US LC workshop Chicago

Feb. 2002: LC02 accel. workshop, SLAC

April 2002: St. Malo workshop

‘Grass roots’ LC opportunity meetings:
   FNAL, Cornell (April), SLAC (May)

June 2002: US LC ‘retreat’ Santa Cruz

July 2002: ACFA LC workshop Tokyo
AN EXCITING YEAR AHEAD

August 2002: Internatl. LCWS02 Korea

Sept. 2002: ‘Nanobeams’ Lausanne

Nov. 2002: ECFA/DESY Workshop Prague

Nov. 2002: German Science Council report: evaluation of TESLA


Jan. 2003: US LC workshop (Texas)
At many levels, excellent progress:

**Grass roots community level:**
people organising, taking initiative
engagement + collab. @ workshops

**Formal hep community level:**
regional steering groups
international steering group
Loew panel

**Inter-governmental level:**
OECD consultative group on hep
(senior civil servants, physicists)

**Tremendous momentum for LC ...**
Some concerns

Timescale:
Desirable LC turn-on soon after LHC
Construction start ≤ 2005 unlikely(?)
NB lengthy ‘Planfeststellungsverfahren’

Funding profile:
LC will be a $5B-scale project
US funding flat @ $19.2M past 5 years

People:
Many worked on LC 10 years already
Many more years on ‘life support’ no go

Scale of project REQUIRES user groups
to be involved in accel. design + construction
At Santa Cruz Linear Collider Retreat:

Agencies rep. by Procario + Goldberg:
FY03 budget subm. pre-Subpanel
budget not yet finalised
OMB budget ‘cap’ on DoE NLC budget
→ problem to support univ. accel. R&D?

Appears likely that:
≤ $1M available to ALL user groups
for ALL LC R&D
from EACH of DoE and NSF

Difficult year:
not optimal for nurturing a growing and
enthusiastic user-group participation

Personal opinion:
Needs to increase × 5-10 in few years
At Santa Cruz Linear Collider Retreat:

27 US institutions expressed interest in LC accelerator R&D (Finley, Himel, Rogers) 
(DoE+NSF) × (SLAC+FNAL+Cornell)

77 possible projects discussed:

www-project.slac.stanford.edu/lc/Project_List/intro.htm

At least as many institutions expressed interest in detector R&D:

blueox.uoregon.edu/~jimbrau/LC/LCrandd.ps
Mechanisms for user-group involvement in LC R&D:

Two coordinated proposals: DoE + NSF
  NSF bids coordinated thru UCLC
  DoE bids via FNAL/SLAC LCRD groups:

August 1: 2-page EoI → LCRD (Gollin)
  collation, review by LCRD + ALCPG

August 11: Advice/feedback → proponents

Sept. 3: 5-page proposal → LCRD

Sept. 6: Complete proposal → ALCPG
  NSF proposal reviewed by same panels

Sept. 15: Review panels FB → proponents

Sept. 15: UCLC proposal submitted → NSF

> Sept. 15: Each group proposal → DoE
SLAC LC R&D Group (LCRD):

Jim Brau
Philip Burrows
Sridhara Dasu
Norman Graf
Jeff Gronberg
JoAnne Hewett
Tom Himel
John Jaros
Young Kee Kim
Usha Mallik
Marcello Piccolo
Bruce Schumm
Jim Siegrist
Bob Wilson

Weekly ‘LCD’ meeting: Tuesdays 13.30:
www-sldnt.slac.stanford.edu/nld/meetings/index.htm

Drop in or phone in!
Announcement email list: Norm Graf
SUMMARY

The world hep community has spoken!

Funding agencies: please support:
lab-based ‘large scale’ LC R&D
university R&D on detectors + machine leveraging of lab resources by users regional/international travel

Major labs: please support:
user-group initiatives/participation in detector + accelerator R&D projects

Users:
capitalise on lab infrastructure support your labs + funding agencies!