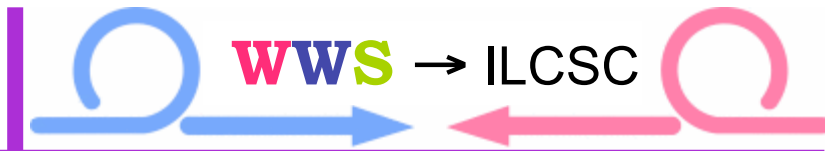


Report to ILCSC from the World-Wide Study of Physics and Detectors for a Linear Collider.

1. Proposed* responsibilities for the WWSOC
2. Workshops etc.
3. Detector Concepts
4. Working panels and their deadlines.
5. _____

* See circulated paper "Proposal for the organisation of the International Linear Collider Experimental program."

Also at http://blueox.uoregon.edu/~lc/wwstudy/ORG_OF_GLOBAL_EXP_PROG.pdf

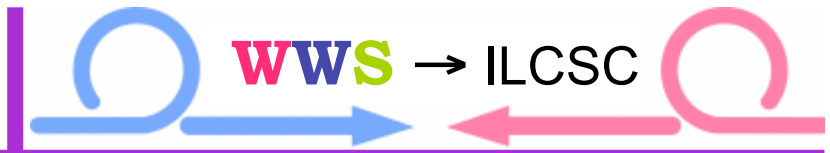


1. The ILCSC will charge the WWSOC with specific responsibilities, which should include:

- a) Recognizing studies being made of whole-detector concepts, and co-ordinating the presentation of their performance studies and their cost estimates, on timescales set by ILCSC. The WWSOC will work toward interregional, and multiple, studies, leading eventually to detector technical design reports (TDRs);

- b) Coordinating with the Central Team set up by Global Design Initiative for the accelerator, especially on questions of detector cost, beam delivery, accelerator issues impacting the experimental physics program, and the machine detector interface;

PROPOSAL to ILCSC

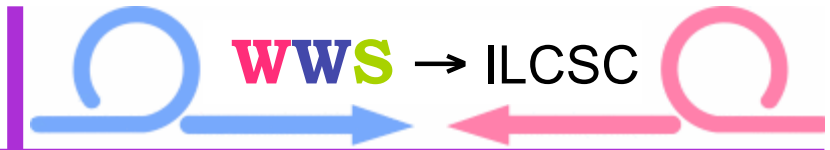


responsibilities, continued.

- c) Keeping a register of those detector, accelerator design, and machine-detector interface R&D activities which are relevant to the Linear Collider experimental physics program.
- d) Identifying R&D activities which are vital to the Linear Collider experimental physics program, especially those which are lacking effort;
- e) Arranging for peer review of R&D proposals;
- f) Reporting on all of these matters, and others assigned, to the ILCSC.

In parallel with these new responsibilities, the WWS will, as agreed with ICFA, continue to organise worldwide workshops (LCWS) on Physics and Detectors for the ILC, and to support regional and specialist workshops and meetings.

Co-chairs **WWSOC membership**



- Jim Brau, University of Oregon
- David Miller, U. C. London
- Hitoshi Yamamoto, Tohoku University

American Committee Members

- John Jaros, SLAC (USA)
- Dean Karlen, Victoria (Canada)
- Andreas Kronfeld, Fermilab (USA)
- Mark Oreglia, University of Chicago (USA)
- Ritchie Patterson, Cornell (USA)

Asian Committee Members

- Akiya Miyamoto, KEK (Japan)
- Atul Gurtu, Tata Institute of Fundamental Research (India)
- JooSang Kang, Korea University Seoul (Korea)
- ChangGen Yang, IHEP Beijing (China)
- Wei-Shu(George) Hou, National Taiwan University (Taiwan)

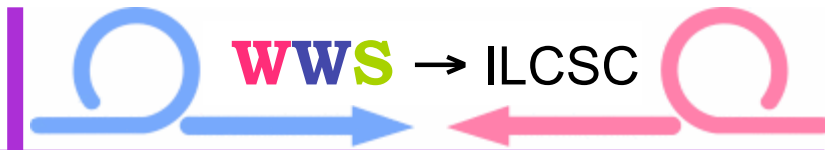
European Committee Members

- Tiziano Camporesi, CERN
- Michael Danilov, ITEP (Russia)
- Rolf Heuer, University of Hamburg (Germany)
- Francois Richard, Orsay (France)
- Ron Settles, Munich (Germany)

Details of WWS activities and links to regional studies at:

<http://blueox.uoregon.edu/~lc/wwstudy/>

2. Workshops



ACFA Taipei; 9-12 November 2004;

96 participants, mostly from Japan, Korea, Taiwan.

LCWS Stanford; 18-22 March 2005

Programme planning well advanced.

ALCPG Snowmass; 13-27 August 2005

More international than previous regional meetings.

Bookings made but programme still very flexible.

May stress detector concept studies (see below).

Next ILC workshop there too, in parallel ?

Set the groups work to do.

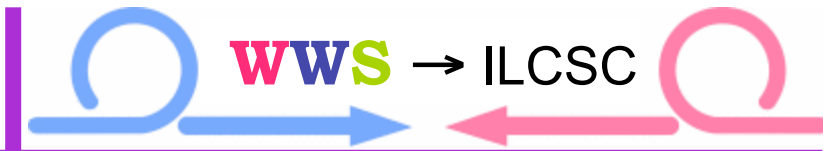
Not yet finalised:

ACFA July 2005; preparing for Snowmass

ECFA, Vienna, November 2005; involves students, theorists etc. who cannot get to Snowmass.

LCWS, India, ~March 2006

3. Detector Concepts

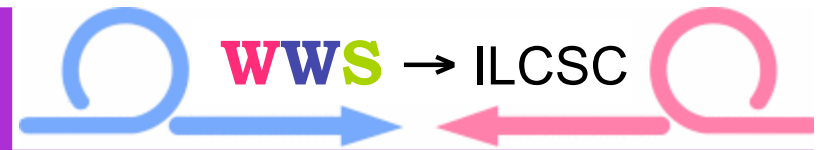


Teams forming bottom-up. So far:

1. SiD; all-silicon tracking, high B
SLAC+FNAL working together; inviting European and Asian participants.
2. "GLD"; Large volume gaseous tracker with lower B
starting from JLC/GLC detector; inviting American and European participants.
3. ex-TESLA and ex N.American "Large"
first get together 13-15 January 2005;
+video links to SiD and "GLD" to discuss benchmarks and common tools.

Sub-detector R&D teams encouraged to contribute to more than one concept; e.g. TPC development, vertex detectors, etc. etc.

Detector concept timescale



Note: All timelines are based on the GDI proposal on the web. They will change to fit Central Team plans.

Step 1. Form panels (see below)

Step 2. To match accelerator CDR (2005 Or 2006?)
Single preliminary costing and performance paper for all concepts.

Step 3. To match accelerator TDR (2007?)
Detector CDRs with performance on benchmarks, technical feasibility, refined costs etc. Received by WWSOC

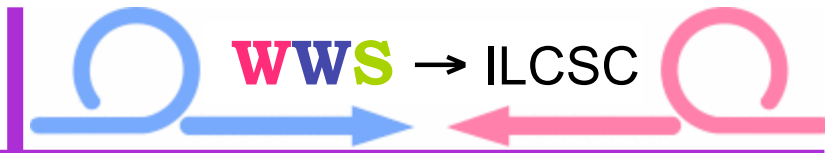
Step 4. When Global Lab. is formed (2008?)
L.O.I.s for Experiments. **Global Lab.** invites TDRs.

Step 5. Global Lab. + 1 year (2009?)
G.L. receives TDRs and selects experiments.

Concept teams.
(overlapped membership)



Collaborations
(competitive)



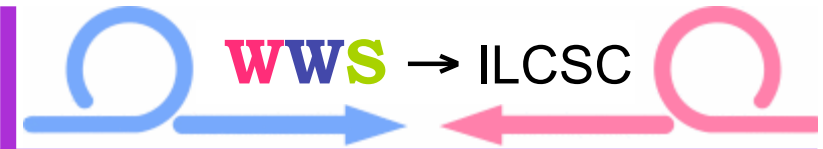
4. Working panels and their deadlines:

Detector R&D Panel.

- maintain register of recognized ongoing detector R&D programs,
- identify important missing activities
(in consultation with concept teams)
- encourage, and arrange for peer review of new proposals
(either through existing regional peer review panels like US
LC Detector Review Committee, DESY PRC etc.
OR, when necessary, through own referees),
- endorse approved programs to national funding agencies.

(Defining charge now. Want panel to start work in January.

Will need to stay in existence until the accelerator TDR, step 3.)



Costing Panel

Inputs from concept teams.

Ensure common basis for all concepts.

Single document on same timescale as machine CDR.

MDI Panel

Liaise with GDE to co-ordinate MDI between accelerator, detector R&D and concept teams.

Identify BDIR issues needing R&D.

(Existing ad hoc group of Tauchi, Woods and Bambade already working in this direction, planning MDI workshop for Jan 05.

Hope to incorporate them in group - after GDE plans clarify.

Will be needed until Global Lab. forms)



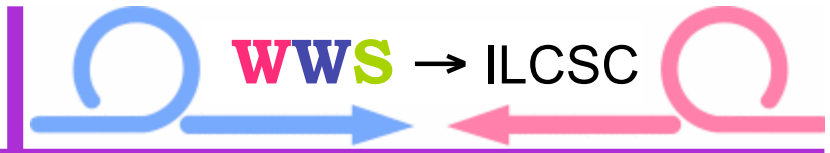
Concept support group?

Suggested at Taipei last week

- to suggest and agree a set of physics benchmarks,
- to encourage sharing of software tools
- to provide a channel for information exchange.

Still working out details, but benchmark definitions already well advanced; should be settled by LCWS at Stanford in March.

Summary



We have made a proposal in response to the ILCSC's request from Paris in February, and have started to do what is contained in the proposal.

We are continuing our existing studies.

ILCSC's general approval is requested for the proposed activity:

- with advice and guidance on the details.