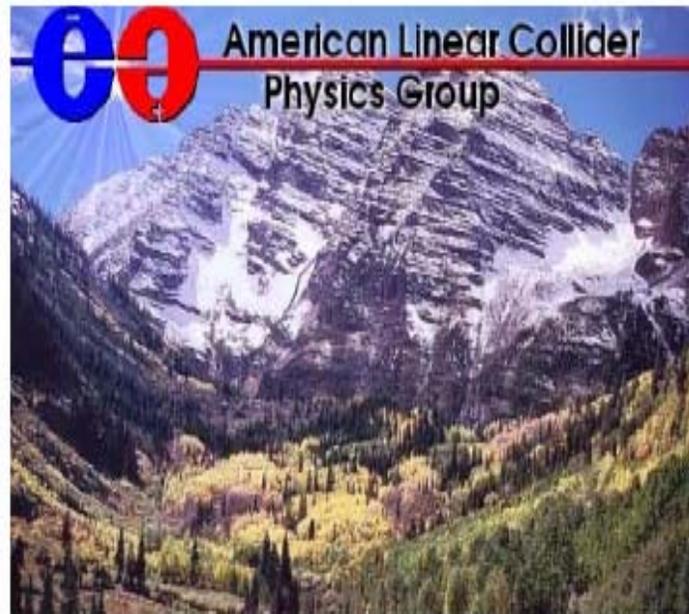


Opening Remarks: ICFA and Governments

Presented at Special Evening Forum

By Jonathan Dorfan



*2005 International Linear Collider Physics and Detector Workshop
and Second ILC Accelerator Workshop
Snowmass, Colorado, August 14-27, 2005*



The Role of ICFA

- **Charter and Aegis**

ICFA, the International Committee for Future Accelerators, was created in 1976 by the International Union of Pure and Applied Physics to facilitate international collaboration in the construction and use of accelerators for high energy physics.

Its purposes, as stated in 1985, are as follows:

- **To promote international collaboration in all phases of the construction and exploitation of very high energy accelerators**
- **To organize regularly world-inclusive meetings for the exchange of information on future plans for regional facilities and for the formulation of advice on joint studies and uses**
- **To organize workshops for the study of problems related to super high-energy accelerator complexes and their international exploitation and to foster research and development of necessary technology**

For more info see: <http://www.fnal.gov/directorate/icfa/>

ICFA MEMBERSHIP

July 2005

Canada

D. Karlen

CERN Member States

T. Akesson

R. Aymar

A. Wagner

China

H. Chen

Japan

S. Komamiya

Y. Totsuka

Russia

V. Rubakov

Y. Tikhonov

USA

J. Dorfan (Chair)

P. Oddone

S. Dawson

Other Countries

S. Novaes

V. Sahni

D. Son

C11

V. Lüth

At its July 3, 2005 meeting,
ICFA elected Albrecht Wagner
to take over as the next Chair of
ICFA in January 2006

Global Planning and Cooperation — A Must for HEP

- Never before has a field of science attempted to globalize itself as extensively as HEP has done recently. It is a challenging task, but one that we must do successfully. Indeed the long-term health of the field depends critically on truly global cooperation
- The necessity for global coordination was formalized by ICFA in its May 1993 ICFA Statement entitled “International Collaboration in the Construction of Future Large Accelerator Projects”.
- ICFA’s role was crucial for the ultimate realization of a *global* LHC and is crucial for launching the Linear Collider

ICFA and the Linear Collider

- **ICFA has been helping guide international cooperation on the Linear Collider since the mid 1990's. Major steps:**

1995: First LC TRC Report, under Greg Loew as Chair

1999: ICFA Statement on Linear Collider

2002: ICFA commissioned the second LC TRC Report, under Greg Loew as Chair

2002: ICFA establishes the ILC Steering Committee (ILCSC) with Maury Tigner as Chair

January 2002: Organizational Structure Proposed for Developing Global LC



ICFA Forms the International Linear Collider Steering Committee February 2002

The ILCSC Charter:

1. Engage in outreach, explaining the intrinsic scientific and technological importance of the project to the scientific community at large, to industry, to government officials and politicians and to the general public
2. Based upon the extensive work already done in the three regions, engage in **defining the scientific roadmap, the scope and primary parameters for machine and detector**. It is particularly important that the initial energy, the initial operations scenario and the goals for upgradeability be properly assessed
3. Monitor the machine R&D activities and **make recommendations on the coordination and sharing of R&D tasks** as appropriate. Although the **accelerator technology** choice may well be determined by the host country, the ILCSC should help **facilitate this choice to the largest degree possible**
4. **Identify models of the organizational structure, based on international partnerships**, adequate for constructing the LC facility. In addition, the ILCSC should make recommendations regarding the role of the host country in the construction and operation of the facility
5. Carry out such other tasks as may be approved or directed by ICFA

Membership of the ILCSC

Directors

CERN

DESY

Fermilab

KEK

SLAC

Luciano Maiani->Robert Aymar

Albrecht Wagner

Michael Witherell->Pier Oddone

Hiroataka Sugawara->Yoji Totsuka

Jonathan Dorfan

LC Steering Group Chairs

Asian

European

N. American

Won Namkung

Brian Foster->Torsten Akesson

Jonathan Dorfan->S. Ozaki



Other

Chair

China (IHEP Director)

Russia (BINP Director)

ICFA outside LC regions

Asia Rep.

Europe Rep.

N. American Rep.

Secretary

Maury Tigner->S-I Kurokawa

Hesheng Chen

Alexander Skrinsky

Carlos Garcia Canal->Vinod Sahni

Sachio Komamiya

David Miller->Francois Richard

Paul Grannis ->Jim Brau

Roy Rubinstein

At its July 3, 2005 meeting, ICFA endorsed Shin-Ichi Kurokawa as the new Chair of ILCSC

Main Linac RF Technology Down-select

- International Technology Recommendation Panel's recommendation was presented to ILCSC & ICFA on August 19, 2004 in a joint meeting in Beijing.

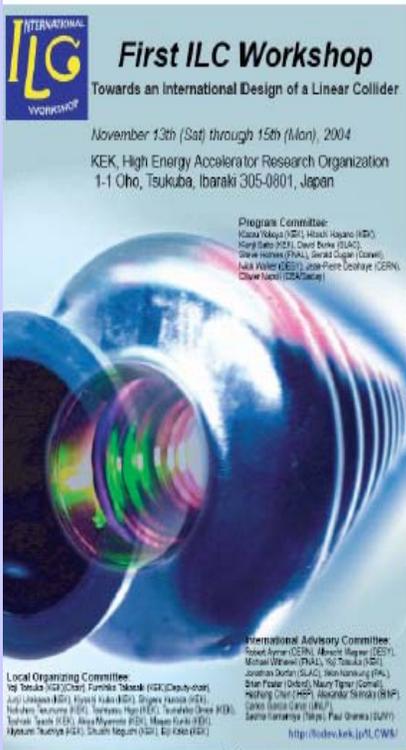
ICFA unanimously endorsed the recommendation on August 20, 2004



•Global project named International Linear Collider (ILC)

ILCSC Set Up the First ILC Workshop (Hosted by KEK) and the second here at Snowmass

Start of the Global Design Initiative



INTERNATIONAL ILC WORKSHOP
First ILC Workshop
 Towards an International Design of a Linear Collider

November 13th (Sat) through 15th (Mon), 2004
 KEK, High Energy Accelerator Research Organization
 1-1 Oho, Tsukuba, Ibaraki 305-0801, Japan

Program Committee:
 Kazuo Yokoya (KEK), Hiroshi Hayano (KEK),
 Koryu Tada (KEK), David Burke (SLAC),
 Shiro Nomura (PRL), Bernd Siegel (Cornell),
 John Adler (DESY), Jean-Pierre Deléglise (CERN),
 Clive Toth (DESY)

International Advisory Committee:
 Robert Ayres (CERN), Alberto Ripstein (DESY),
 Mikhail Uzunov (PRL), Yoichi Taniuchi (KEK),
 Jonathan Jordan (SLAC), Reinhard Heide (PRL),
 Steve Fraxer (DESY), Mary Tigner (Cornell),
 Michael Chan (NSF), Alexander Sotnikov (BNP),
 Carlos Torres (CERN),
 Lorna Hartrich (SLAC), Paul Stenka (SLAC)

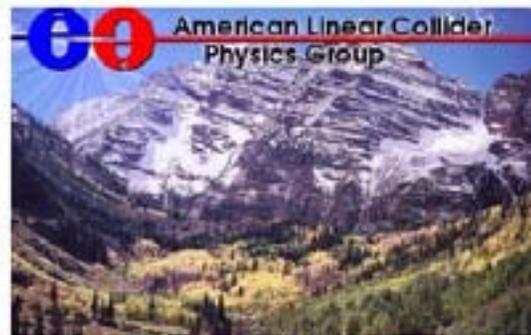
Local Organizing Committee:
 Ryo Tanaka (KEK), Fumika Sakaki (KEK), Chieko Ohno,
 Aki Uchiyama (KEK), Hiroyuki Kubo (KEK), Shigeru Hasebe (KEK),
 Norihisa Yamamoto (KEK), Tetsuya Mori (KEK), Takanori Oishi (KEK),
 Toshiaki Tani (KEK), Masao Miyamoto (KEK), Masao Furuta (KEK),
 Hiroyuki Taniuchi (KEK), Shunji Inagaki (KEK), Keiichi Kuroki (KEK)

<http://ilcdev.kek.jp/ILCW04/>

Nov 13-15, 2004
 At KEK



~ 220 participants from 3 regions, most of them accelerator experts



2005 International Linear Collider Physics and Detector Workshop and Second ILC Accelerator Workshop Snowmass, Colorado, August 14-27, 2005

The American Linear Collider Physics Group (ALCPG) will host a two week workshop in Snowmass, Colorado, August 14-27, 2005

In parallel, the International Linear Collider Steering Committee will sponsor the Second ILC accelerator workshop to address both accelerator and machine-detector interface issues.

A more detailed statement of purpose for these workshops can be found here:

Workshop Purpose

Click here for important announcements:

Announcements

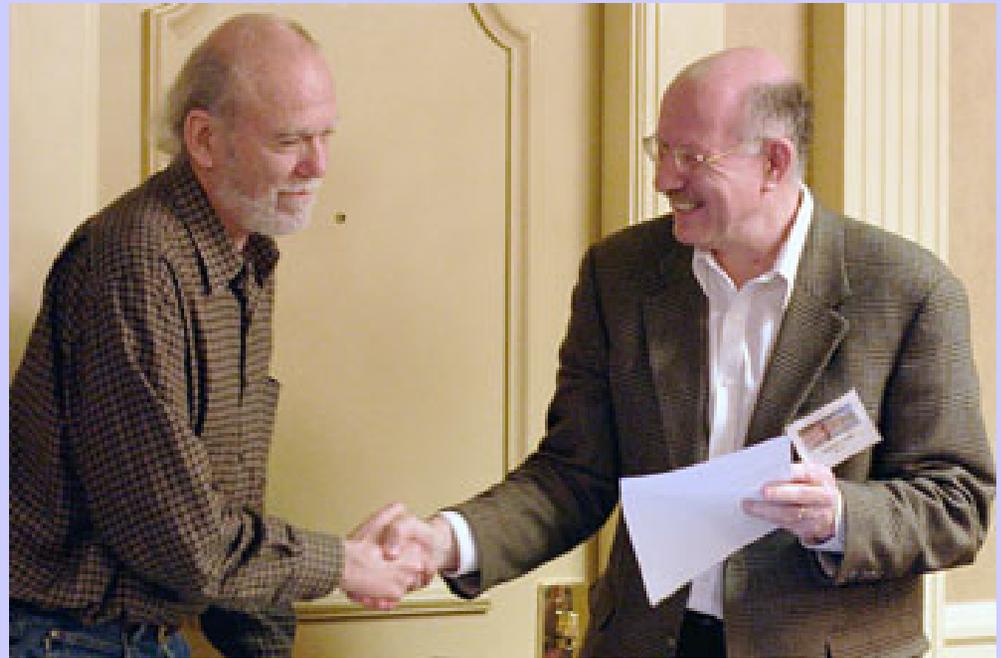
- Information on the ALCPG can be found at <http://physics.uoregon.edu/~ilc/alcpg/>.
- Information on the first ILC accelerator workshop held at KEK in November 2004 can be found at <http://ilcdev.kek.jp/ILCWS/>.
- The World Wide Study of Physics and Detectors for Future Linear e-e- Colliders can be found at <http://physics.uoregon.edu/~ilc/wwwstudy/>.

Registration Program Committees Working Groups

Accommodations

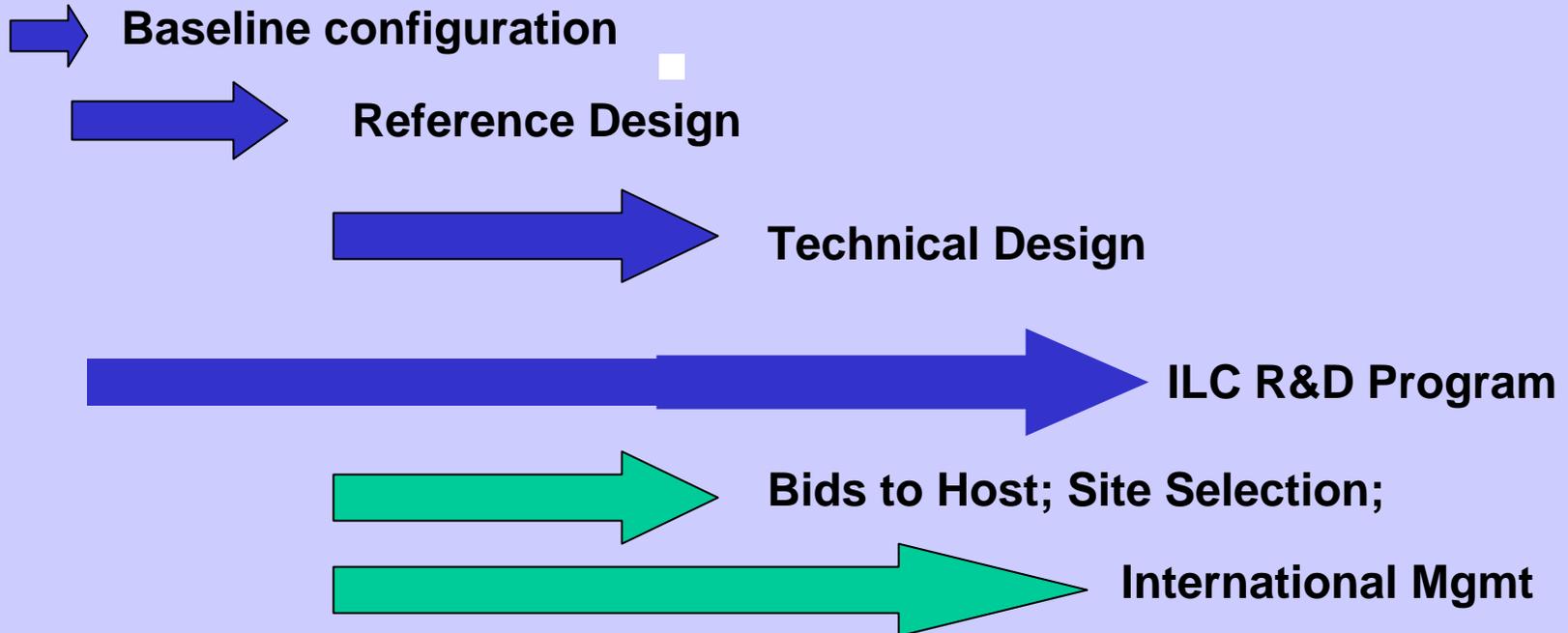
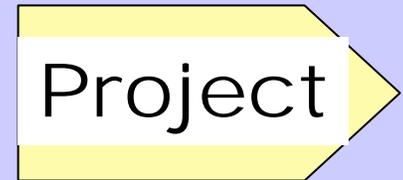
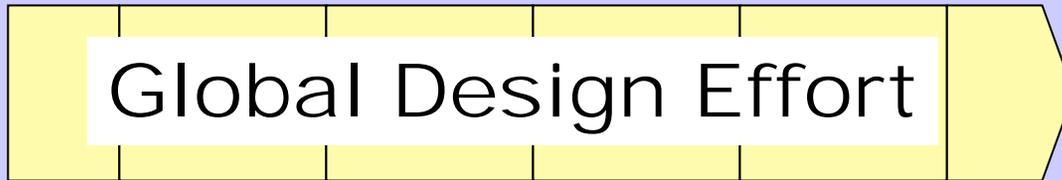
Global Design Effort (GDE)

- ILCSC set up a committee with Paul Grannis as Chair to select a Director for the GDE
- February 2005, at TRIUMF, ILCSC and ICFA unanimously endorsed the Committee's choice
- **On March 18, 2005 Barry Barish officially accepted the position at the opening of LCWS 05 meeting at Stanford**



The GDE Plan and Schedule

2005 2006 2007 2008 2009 2010



ILCSC – Next Steps

- **ILCSC will continue to coordinate the worldwide ILC in accordance with its Charter**
- **GDE will continue to report to ILCSC until such time as the GDE gets organized under a federation of worldwide government agencies. At that time ICFA will step aside**
- **A natural time for ICFA/ILCSC to hand off the GDE oversight to such a body would be at the CDR→TDR transition**

We Live in Extraordinary Times

- **Just as it did with the LHC in the 1990's, ICFA has a very strong focus on facilitating the wishes of the worldwide HEP community – in this era of the 2000's it is to establish as expeditiously as possible a fully international TeV Linear Collider**
-
- **At no time in the history of particle physics has the scientific landscape presented us with such an exciting spectrum of unanswered questions! The LHC will make major discoveries that challenge that agenda, but to engage the fullness of the scientific quest will take a companion TeV Linear Collider**

The Role of Governments

- **Governments are the key – they will make the decisions that lead to the establishment of an ILC project**
- **The scientific community, through ICFA, is maintaining close contact with the key government agencies**
 - **The main forum is the Funding Agencies for Linear Collider (FALC), which meets about twice a year. Major strategy steps (like ITRP, GDE etc) are discussed with FALC to ensure acceptance by the governments of ICFA's actions**

Role of Governments

- **Besides the discussions with FALC, there are important ongoing governmental processes:**
 - 1) Strong financial support in all three regions for LC R&D, some by agency, some from EU**
 - 2) OECD set up a Consultative Group for HEP. In 2002, it completed a comprehensive report on HEP, in which it strongly endorsed an internationally federated LC as the next major HEP project with concurrent running with the LHC**
 - 3) OECD Committee for Scientific and Technology Policy, at the Ministerial Level, met January 29-30, 2004 and endorsed a Ministerial Statement. ICFA endorsed this action in a February 2004 Statement on Linear Colliders**

ICFA Statement on Linear Colliders

“ICFA welcomes the January 2004 OECD Ministerial Statement on International Cooperation on Large Accelerator-based Projects in High-Energy Physics, which ‘acknowledged the importance of ensuring access to large-scale research infrastructure and the importance of the long-term vitality of high-energy physics’. They noted the worldwide consensus of the scientific community, which has chosen an electron-positron linear collider as the next accelerator-based facility to complement and expand on the discoveries that are likely to emerge from the Large Hadron Collider currently being built at CERN. They agreed that the planning and implementation of such a large, multi-year project should be carried out on a global basis, and should involve consultations among not just scientists, but also representatives of science funding agencies from interested countries.”

13 February 2004