

ICFA Report to ICHEP 2016

August 2015 to August 2016

J. Mnich (DESY)

August 10, 2016

ICFA Mandate

ICFA: International Committee for Future Accelerators

created in 1976 by the International Union of Pure and Applied Physics (IUPAP)

Mandate:

- **promote international collaboration on very high energy accelerators**
- **organize regularly world-inclusive meetings for the exchange of information on future plans**
- **organize workshops for the study of problems related to super high-energy accelerators**

ICFA is the recognised body to represent high energy physics on a global scale.

Its aim is to facilitate international collaboration in the planning, construction and exploitation of accelerators for high energy physics and related fields.

ICFA Membership

16 members from all world regions, including the directors of the major particle physics laboratories

CERN member states

H. Abramowicz (U Tel Aviv)
F. Gianotti (CERN)
J. Mnich (DESY, Chair)

USA

N. Lockyer (FNAL)
D. MacFarlane (SLAC)
N. Hadley (U Maryland)

Japan

T. Mori (U Tokyo)
M. Yamauchi (KEK)

Russia

A. Bondar (Budker)
S. Ivanov (IHEP)

Canada

M. Roney (U Victoria)

China

Y. Wang (IHEP)

Other countries

M. Cho (POSTECH)
L. de Paula (Rio de Janeiro)
V. Matveev (JINR)

IUPAP C11 (ex officio)

J. Fuster (U Valencia)

Secretary

R. Rubinstein (FNAL, until 2016)
P. Bhat (FNAL)

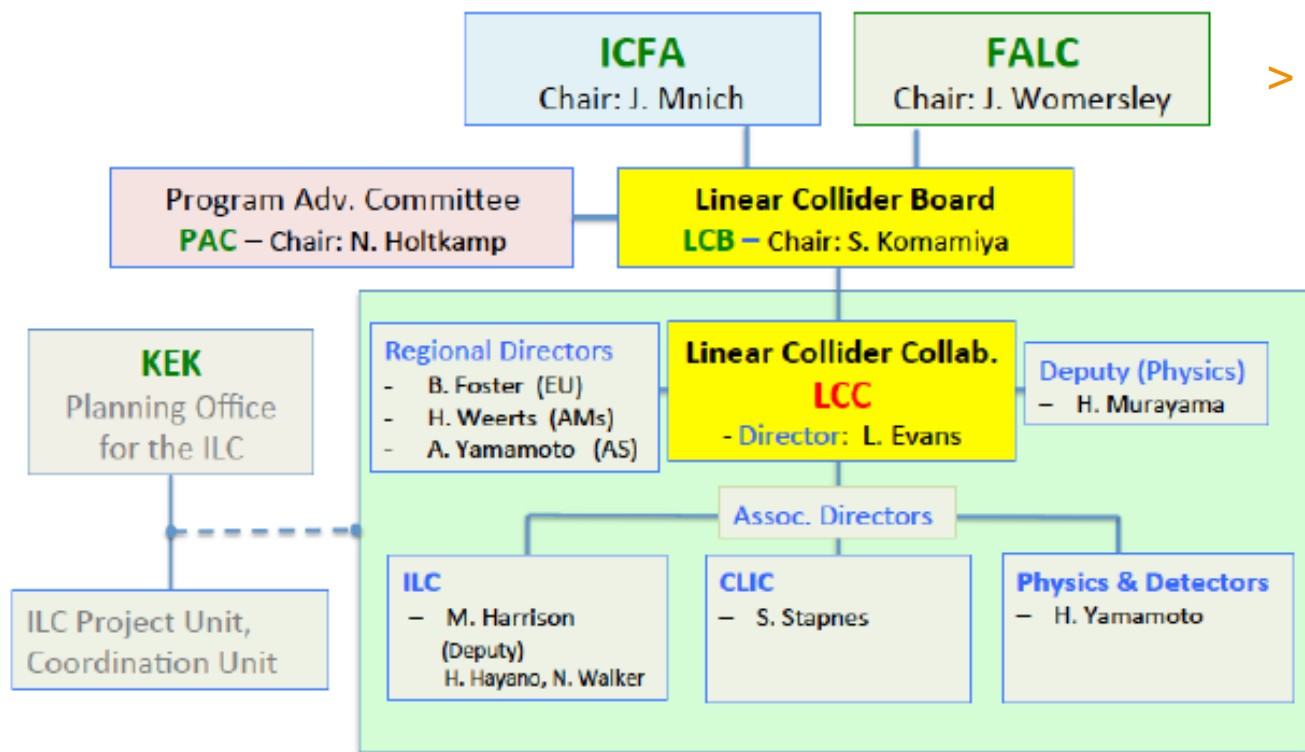
Meetings

- > **ICFA is holding meetings at least twice per year**
- > **A two-days meeting in February**
 - **ICFA meeting was held on 25/26 February 20156 at J-PARC in Japan**
 - **with lab directors of the world's leading particle physics laboratories allowing a more extensive discussion of the status of particle physics.**
- > **During the large international particle physics conference**
 - **meeting took place on Sunday during ICHEP 2016**
- > **Close links to**
 - **C11: ICFA chair report IUPAP commission „Particle and Fields“**
 - **FALC: chairs report at each other's meeting**

- > **Linear Collider**
- > **Future, global facilities for particle physics**
- > **ICFA panels:**
 - **runs several panel on issues relevant for the field**

- > **For many years ICFA is supporting and closely following the efforts for a linear electron-positron collider**
 - **2002: ICFA created the International Linear Collider Steering Committee (ILCSC) to promote the construction of an electron-positron linear collider through world-wide collaboration**
 - **2003: ICFA created the International Technology Recommendation Panel (ITRP). Two remaining LC design options:**
 - **2005 : ICFA set up Global Design Effort (GDE) to produce an ILC design and its cost**
 - **June 2013: Technical Design Report completed, including detectors, with costs**
 - **2013: ILCSC ended; Linear Collider Board (LCB) formed by ICFA, to oversee the Linear Collider Collaboration (LCC)**
 - **Note: this structure includes ILC and CLIC**

Linear Collider : Current Structure



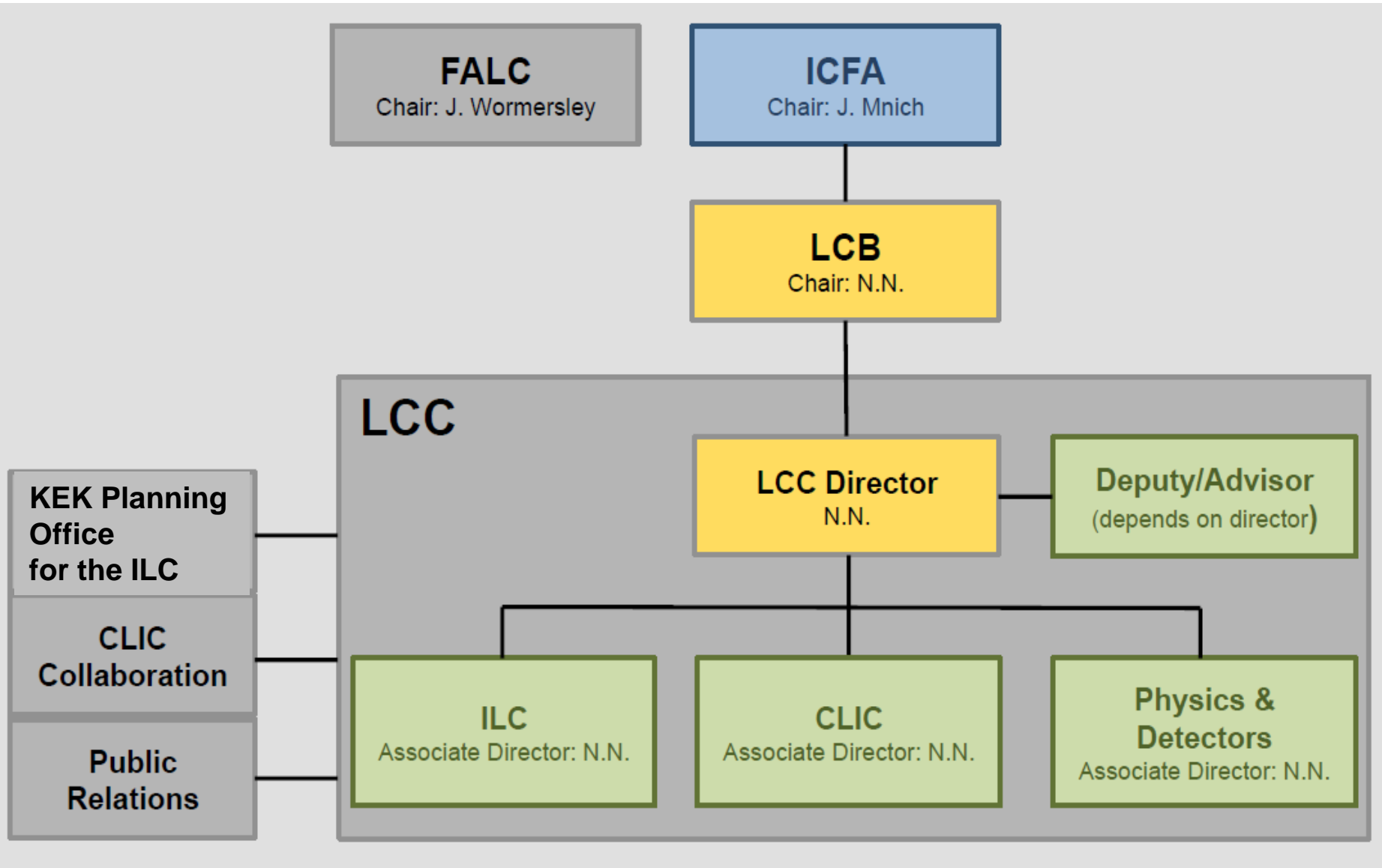
> Note: CLIC is incorporated in this structure

Figure 1. Structure of the Linear Collider Collaboration

Linear Collider

- > **At the February meeting ICFA decided to continue the LC structure beyond 2016**
- > **After a careful review update the structure and mandate**
 - **as little changes as necessary**
 - **keep names of LCB and LCC**
- > **Make it leaner**
- > **Main purpose over the next years:**
 - **oversight on worldwide R&D efforts**
 - **keep the successful close collaboration and synergy between ILC and CLIC**
 - **promote LC in politics and general public**

New Mandate for LCB/LCC



- > **New structure to be reviewed by ICFA on a regular basis, at least after three years**
- > **Next step:**
 - **fill the boxes with names**

ICFA Panels

> Reports from ICFA panels

- **Standing Committee on Interregional Connectivity**
- **Beam Dynamics Panel**
- **Instrumentation Innovation and Development Panel**
- **Advanced and Novel Accelerators Panel**
- **The Study Group on Data Preservation in High Energy Physics**
- **Neutrino Panel**

> New:

- **Panel on Sustainable Accelerators and Colliders**

> **ICFA is in the process of reviewing and updating the mandate of its Panels**

ICFA and Accelerator Science

- > **Proposal for a new IUPAP Working Group on Accelerator Science**
- > **ICFA as an existing IUPAP Working Group involved in accelerator-related issues was asked for comments:**
 - **ICFA represents the major labs worldwide that carry out research at the energy frontier**
 - **ICFA has well-established Panels very relevant to many aspects, including generic, of accelerator R&D**
 - **ICFA would welcome a new IUPAP working group which covers a broader area of accelerators than ICFA itself does; the new group should have links to ICFA and duplication should be avoided**
 - **ICFA Panels can be a bridge to the new group**
- > **An interim working group is being set up by IUPAP to propose a charge and initial membership of the new Working Group, and ICFA has been asked for nominations to the interim working group**

Summary

- > **ICFA continues to support the efforts for a linear collider**
 - **new, updated structure in place**
- > **ICFA discusses other projects and studies for future large global projects**
- > **ICFA runs a number of panels to study issues relevant for the field**

- > **Next meetings:**
 - **Valencia** **February 16/17, 2017**
 - **Lepton-Photon 2017**
 Guangzhou, China **August 9, 2017**
 - **ICFA seminar Canada** **fall 2017, place & date tbc**

- > **New ICFA web page: <http://icfa.fnal.gov/>**