



## Summary of ASEPS Round Tables 1 and 2 (L. Cifarrelli, T. Nakada)

### Round Tables 1 and 2 International Strategic Planning for Large Research Facilities

After the CERN Council Open Symposium on the European Strategy for Particle Physics (Krakow, Poland, September 2012) – following the announcement in July 2012 by CERN Large Hadron Collider (LHC) experiments ATLAS and CMS of the discovery of a Higgs boson, and after the subsequent 2013 meetings scheduled in Europe by the CERN Council Strategy Group, on 30 May 2013, in Brussels, the CERN Council formally adopted an update to the European strategy for particle physics which was put in place in 2006.

*"Key points of the strategy are that Europe, and the European particle physics community, should:*

- Exploit its current world-leading facility for particle physics, the LHC, to its full potential over a period of many years, with a series of planned upgrades;*
- Continue to develop novel techniques leading to ambitious future accelerator projects on a global scale;*
- Be open to engagement in a range of unique basic physics research projects alongside the LHC;*
- Be open to collaboration in particle physics projects beyond the European region;*
- Continue to invest substantial effort in communication, education and outreach to engage global publics with science."*

(From CERN press release, 30 May 2013)

It was then time to take stock at a broader global level of the progresses and perspectives sketched by this strategy aiming at setting the direction for future particle physics research. The roles of Europe, Asia and the Americas in this future scenario are taking shape and the ASEPS Round Tables were meant to focus on the timely issue of "International Strategic Planning for Large Research Facilities", gathering some of the main actors in the field as follows.

#### Round Table 1 International Strategic Planning for Large Research Facilities – Science and Technology Issues

**Moderators:**

Luisa CIFARELLI, *EPS Vice President*

Tatsuya NAKADA, *Scientific Secretary of European Strategy, CERN*

**Local Organizer:**

Mitsuaki NOZAKI, *KEK*

**Speakers:**

Massimo ALTARELLI, *European XFEL Managing Director*

William BARLETTA, *Director of the US Particle Accelerator School, MIT*

Frédéric BORDRY, *Future CERN Director of Accelerator and Technology*

Jie GAO, *Chair of the Asian Linear Collider Steering Committee (ALCSC)*

Akira YAMAMOTO, *ILC GDE Project Manager, KEK*

Yifang WANG, *Director of the Institute of High Energy Physics, Chinese Academy of Sciences*

## Round Table 2

### ***International Strategic Planning for Large Research Facilities – Policy and Cooperation***

#### ***Moderators:***

Luisa CIFARELLI, *EPS Vice President*

Tatsuya NAKADA, *Scientific Secretary of European Strategy, CERN*

#### ***Local Organizer:***

Mitsuaki NOZAKI, *KEK*

#### ***Speakers:***

Sergio BERTOLUCCI, *Director for Research and Scientific Computing, CERN*

Lyn EVANS, *ILC Director, CERN*

Jie Sun-Kee KIM, *Director of the Rare Isotope Science Project, Institute for Basic Science*

Shoji NAGAMIYA, *AAPPS President, J-PARC*

Guenther ROSNER, *FAIR Managing Director Research and Administration*

Jim STRAIT, *LBNE Project Manager, Fermilab Directorate*

Satoru YAMASHITA, *International Center for Elementary Particle Physics, University of Tokyo*

As introduced above, the ASEPS Round Tables were organised with the aim to provide a comprehensive view of the status and plan for large accelerator based infrastructures in the world. It was also hoped that they would serve as one of the steps to achieve worldwide consensus on the future facilities.

Scientific and technological aspects to justify the needs and methods, and political and organisational frameworks needed for realisation were dealt separately in the two separate sessions.

In both sessions, a series of 20 minutes presentations were given by the leading members of national and international laboratories and organisations with large facilities based on accelerators, followed by extensive and live discussions by the panel members and audiences.

High energy physics programmes caught a particular focus in the discussion, where the Asia, Europe and America regions have their own roadmaps and strategies. The round table discussion clearly provided a unique opportunity for exchanging their views.

After the discussion, it became clear that a possible future picture could be that a construction of the ILC in Japan and a long baseline neutrino programme in the U.S., while Europe exploits the LHC and prepare for the next energy frontier machine which can be defined only after the data from the LHC obtained at 14 TeV are analysed.