

## **C11 Report to IUPAP Commission Chairs and Executive Committee**

October 2016

*Juan Fuster, Chair IUPAP-C11 Commission*

### **C11 Officers:**

**Chair:** Juan Fuster (2014) (2011), Spain

**Vice-Chair:** Heidi Schellman (2014)(2011), USA

**Secretary:** Soo-Bong Kim (2014)(2011), Korea

### **C11 Members:**

Martin Schnabl (2014) Czech Republic

Zhizhong Xing (2014) China

Amol Dighe I(2014) India

Dezső Horváth (2014) Hungary

Mark Lancaster (2011) United Kingdom

Mihoko Nojiri (2014) Japan

Vladimir Kekelidze (2011) Russian Federation

Raymond Volkas (2014) Australia

Sergio Novaes (2011) Brazil

Johan Rathsman (2014) Sweden

Florenca Canelli (2014) Switzerland

### **C11 Associate Members:**

Johannes Knapp (C4)

Eugenio Nappi (C12)

### **C11 Observers:**

Kok Khoo Phua, Secretary General IUPAP

### **Activities:**

#### **Introduction:**

In 2016 the C11 commission held four meetings, three of them were by video-conference and one on-site during the International Conference on High Energy Physics (ICHEP) in Chicago on the 7<sup>th</sup> of August 2016. The agenda of the meeting can be seen at: <https://indico.cern.ch/event/555712/>. Discussion material and presentations are also accessible at this location. At this meeting, the commission reviewed recently IUPAP-sponsored conferences, discussed the upcoming conferences seeking for sponsorship, reviewed the progress on upcoming conferences and selected the location of future conferences. This year the IUPAP-C11 Young Scientists Prize process took place and the prizes were awarded during the ICHEP conference in Chicago. Cooperation with the International committee for Future Accelerators (ICFA) develops well. Specific issues and concerns under discussion are the ranking of Universities and the future of the Lepton Photon conference.

## Sponsored conferences in 2016 and recommendations for future conferences:

- ***The 38<sup>th</sup> International Conference on High Energy Physics (ICHEP 2016) in Chicago, August 3-9 2016*** (Chair: Young-Kee Kim, U. Chicago). Main conference in High Energy Physics. The conference was very successful in attendance, organization and quality of the talks. The number of contributions received was 1600. About 600 talks and 500 posters were presented at the conference. A rich programme of dissemination activities also took place during the conference in particular the public talk on gravitational waves by Barry Barish. Gender issues were very well balanced as 50% of conveners and 37% of the plenary speakers were women. Number of attendees was 1430 from 51 countries, being 20% students, 21% postdoc, 20% women, 52% from Americas. A total of 175 grants were given, mainly for students.
- ***XXVII International Conference on Neutrino Physics and Astrophysics, Neutrino 2016 (South Kensington, July 4-9,2016)*** (chair: Ken Long, U. Imperial College, London). Main conference on neutrino physics. Attendance was 700 people and had to be limited due to the venue size. Participation had 20% women and 30% students. Next Neutrino conference in 2018 will be held in Heidelberg on 4<sup>th</sup>-9<sup>th</sup> of June.
- ***XXIII International Baldin Seminar on High Energy Physics (Dubna, Sep. 19-24,2016)*** (chairs: V.V. Burov V.V. and A.I. Malakhov A.I., JINR, Dubna). Main topic of the conference is on strong interactions. Past conference there were about 120 reports from 250 people from 20 countries. 22% students and 20% women as well as 20% of all speakers.

The list of recommended conferences to be sponsored by IUPAP in 2017 is:

- XXVIII International Symposium on Lepton Photon Interactions at High Energies (LP) in Guangzhou (China) 7-12 August. ***Recommended as A;***
- 8<sup>th</sup> International Particle Accelerator Conference (IPAC), Copenhagen, Denmark, 14-19 May. ***Recommended as B;***
- EPS Conference on High Energy Physics in Venice, Italy 5-10 July. ***Recommended as C.***

Upcoming conferences after 2017 under C11 supervision are:

- 2018, The 38<sup>th</sup> International Conference on High Energy Physics (ICHEP 2018) in Seoul (Korea).
- 2019 XXIX International Symposium on Lepton Photon Interactions at High Energies (LP) in Toronto (Canada)
- 2020, The 39<sup>th</sup> International Conference on High Energy Physics (ICHEP 2018) in Prague (Czech Republic).

The Lepton Photon 2019 conference in Toronto and ICHEP-2020 in Prague were decided at last C11 meeting in Chicago.

A discussion on the relevance and necessity to publish the conference proceedings also took place. The C11 recommended continuing to publish proceedings at least in electronic format. Main argument in favour was to encourage participation of young researchers into conferences and help getting credits for their career path.

## **ICFA**

ICFA and C11 cooperation performs very well. Both ICFA and C11 chairs have attended the ICFA and C11 meetings, mutually and there is a fluid communication between the two committees. ICFA has renewed its motivation to keep attached to C11 covering not only accelerators related matters but also more generally all particle physics as a whole.

### **On-going discussions: *University Ranking***

Various agencies that rank universities worldwide announced that they would exclude papers from large collaborations from consideration. Their definition of “large collaboration” was applying to those having more than 1000 authors. In this classification publications such as the Higgs and gravitational waves are not considered. This is regarded by C11 to be very damaging to our field and also to science in general especially for those disciplines, which need of large research infrastructures where collaborative effort is a must. Direct discussion with some of these agencies has taken place as a joint effort with other committees like EPS and ICFA. Communication with other IUPAP committees on this issue such as C4 and C12 has been established. Positive movements from agencies have been triggered though the issue is still not solved.

### **On-going discussions: *Lepton Photon, ranking and proceedings***

This conference (Lepton-Photon) has a very nice format of only plenary talks. This makes this conference very attractive to get an excellent view of the activity of the field as described by well recognized experts but lacks the participation of young people and suffers a difficult competition from other big conferences such as EPS which were held a few weeks before. The committee is very concerned about the situation and the future of this conference. The C11 is trying to help and cooperate with the local organizers to increase the participation. Holding mini-workshops, physics schools or poster sessions overlapping with the conference are seen as events, which could contribute to this purpose while keeping the traditional spirit of the conference.

## Young Scientist Prize

This year the Young Scientist Prizes were awarded to:

- Stefan Hoeche (SLAC, USA) for developing high precision Monte Carlo simulations of events at hadronic colliders;
- Liangjian Wen (IHEP, China) for his original contributions to the physics of neutrinos, and in particular, to the discovery of the non-zero neutrino mixing angle  $\theta_{13}$ .

The award-ceremony took place during the ICHEP conference in Chicago.