

IUPAPInternational Union of
Pure and Applied PhysicsCICommission of Particles and Fields

Commission Chair Report for LP09 <u>C11 Meeting</u> August 22, 2009

Patricia McBride, Fermilab Chair CII



IUPAP CI I

- CII one of 20 commissions that make up the International Union of Pure and Applied Physics (IUPAP)
 - IUPAP and ICSU
 - CII Membership
 - Mandate for CII
- CII Activities and Conferences
 - Sponsorship of International Conferences
 - Working Groups and Reports
 - http://www.iupap.org/commissions/cll/reports/
 - CII Awards and Prizes your input is welcome



International Union of Pure and Applied Physics

The <u>International Union of Pure and Applied Physics (IUPAP)</u> was founded in 1922 to stimulate and facilitate international cooperation in physics, and the worldwide development of science. Presently, there are twenty specialized <u>commissions</u>, four <u>affiliated commissions</u>, twelve <u>inter-union groups</u>, and nine <u>working groups</u>.

The mission of **IUPAP** is to assist the worldwide development of physics, to foster international collaboration in physics, and to assist in the application of physics in solving problems of concern to humanity;

IUPAP carries out this mission by sponsoring international meetings, fostering communications and publications, encouraging research and education, fostering free circulation of scientists, promoting international agreements on symbols, units, and nomenclature, and cooperating with other organizations on disciplinary and interdisciplinary problems.

IUPAP is a member of the International Council for Science or ICSU <u>www.icsu.org</u>



International Council of Science (ICSU)

ICSU Mission

In order to strengthen international science for the benefit of society, ICSU mobilizes the knowledge and resources of the international science community to:

- Identify and address major issues of importance to science and society.
- Facilitate interaction amongst scientists across all disciplines and from all countries.
- Promote the participation of all scientists—regardless of race, citizenship, language, political stance, or gender—in the international scientific endeavour.
- Provide independent, authoritative advice to stimulate constructive dialogue between the scientific community and governments, civil society, and the private sector.



Current Members of CII

Chair: McBRIDE, PATRICIA (2008) (2005) USA Vice-Chair: AIHARA, HIROAKI (2008) Japan Secretary: TAYLOR, GEOFFREY (2008) (2005) Australia OLCHEVSKI, ALEXANDER (2008) (2005) Russia LI, WEIGUO (2008) (2005) China CARITHERS, WILLIAM (2008) (2005) USA **MUELLER, THOMAS** (2008) Germany LE DIBERDER, FRANCOIS R. (2008) France DOSSELLI, UMBERTO (2008) Italy GREEN, MICHAEL (2008) UK **AGUILAR-BENITEZ, MANUEL** (2008) Spain GODBOLE, ROHINI (2008) India HOREJSI, JIRI (2008) Czech Republic GAZIS, EVANGELOS (2008) Greece

Associate Members: Maria Victoria Foncesca(C19 2009), William Trischuk (2009), Dan-Olof Riska(C12 2006), Enrique Zas(C4 2006), Suresh Tonwar(2006)



IUPAP CII Mandate

Art I: To promote the **exchange of information and views** among the members of the international scientific community in the general field of Particles and Fields including:

- 1. the theory and experiment concerned with the nature and properties of the fundamental constituents of matter and the forces acting between these constituents;
- 2. the maintaining of liaison with ICFA;
- 3. the accelerators, detectors and techniques used in these investigations;
- 4. the industrial applications of relevant technologies.

Art 2: To **recommend for Union sponsorship international conferences** which qualify for support under Union regulations (see IUPAP Coutumier).

To initiate such conferences as their need arises from the evolution of the Commission field.

To assist in the organization of such conferences when practical. To ensure the compatibility of international conferences in its field and to discourage clashes and incompatibility of dates.

Art 3: To **promote the free circulation of scientists**; to assist conference organizers in ensuring such free circulation and in resolving potential infringements.



CII Sponsored Summer Conferences

- ICHEP-90 Singapore
- LP-91 (with EPS) Geneva
- ICHEP-92 Dallas
- LP-93 Ithaca
- ICHEP-94 Glasgow
- LP-95 Beijing
- ICHEP-96 Warsaw
- LP-97 Hamburg
- ICHEP-98 Vancouver
- LP-99 Stanford

- ICHEP-00 Osaka
- LP-01 Rome
- ICHEP-02 Amsterdam
- LP-03 Batavia
- ICHEP-04 Beijing
- LP-05 Uppsala
- ICHEP-06 Moscow
- LP-07 Daegu
- ICHEP-08 Philadelphia
- LP-09 Hamburg



CIIActivities and Conferences in 2008

• Neutrino 2008 (Together with C4 and C12)

- <u>The XXIII International Conference on Neutrino Physics and Astrophysics</u>
- May 25 -31, 2008
- Christchurch, New Zealand.
- ICHEP 2008
 - <u>34th International Conference on High Energy Physics</u>
 - July 30 August 5, 2008
 - University of Pennsylvania in Philadelphia, Pennsylvania.
- Working Group on Assessment of Individual Achievement in Large Collaborations
- 2008 Young Scientist Prizes:
 - Yasaman Farzan (Institute for Research in Fundamental Sciences, Teheran)
 - Kai-Feng Chen (National Taiwan University, Taipei).



Assessment of Scientific Achievement WG Proposals

http://www.iupap.org/

Eligible authors

The Collaborations shall have clear internal rules regarding who is an eligible author for each publication. The rules shall be public and transparent and follow the guideline that "authorship should be limited to those who have made a significant contribution to the concept, design, execution and interpretation of the research study. All those who have made significant contributions should be offered the opportunity to be listed as authors." (See, as an example: American Physical Society Guidelines for Professional Conduct).

Publication Web page

For each publication the collaboration might release a public web page with supporting notes and details about the individual contributions in analysis, operation, calibration, computing, editorial, etc., which have been essential for the publication.

\bullet Most relevant publications

Rather than a list of all publications, one finds often in the curriculum vitae of experimental particle physicists a list of "most relevant publications." This could be an indicator for scientific merit if the criteria for "most relevant publications" are clearly defined and similar in all collaborations. A good criterion for including a publication in this list could be the appearance of the individual as a significant contributor on the publication web page of the collaboration.



WG Proposed Measures (2)

• Scientific and technical notes

Scientific and technical notes, published by a few authors in an internally or externally refereed form, could help to make individual contributions more visible. These notes can describe in more detail the detector development, operation and calibration, as well as reconstruction algorithms, analysis techniques and statistical methods.

• Public track record

Collaborations should keep a public track record of authorship of refereed internal notes (listed with author names and titles of the notes), nominated speakers for conferences, responsibilities and positions inside the collaboration (with an explanation about the scientific merits required for this task), contributions to the operation of the experiment, membership in editorial boards, and other positions of responsibility.

• Two-tier author list

Collaborations could consider the use of a two-tiered author list to emphasize special contributions to publications. One option is to list a group of "main authors", another option is to keep the alphabetical order but mark some names as principal authors.



WG:Proposed Measures (3)

• Awards

Awards are an important measure to make individual achievements in large collaborations known to outside people. More use should be made of awards in particle physics: HEP-wide prizes, awards in countries, laboratories and universities as well as inside collaborations to acknowledge the scientific achievements of scientists (e.g., for PhD theses, data analysis, detector development, detector operation and calibration).

Working Group Report: http://www.iupap.org/commissions/c11/ reports/wg-assessment-08.pdf







Activities and Sponsored Conferences in 2009

- TIPP09 http://tipp09.kek.jp/
 - The 1st International Conference on Technology and Instrumentation in Particle Physics
 - March 12-17, 2009, Tsukuba, Japan
 - Successful start to a new conference series. >400 Attendees
- LP09 http://lp09.desy.de/
 - <u>XXIV INTERNATIONAL SYMPOSIUM ON LEPTON PHOTON</u> <u>INTERACTIONS AT HIGH ENERGIES</u>
 - August 17-22, 2009, Hamburg, Germany
 - New Working Groups
 - Follow-up on WG on Assessing Achievement in Large Collaborations
 - WG on Conferences in Particle Physics (LP, ICHEP)
 - Do the IUPAP conferences fit the needs of the community?



- International Symposium on Lepton-Photon Interactions
 - LP'II in *Mumbai, India*
 - August 22-27, 2011
- International Conference on High Energy Physics
 - ICHEP'IO in Paris, France
 - July 21-28, 2010
 - <u>www.ichep2010.fr</u>
 - ICHEP'I2 in Melbourne, Australia
 - July 8-15, 2012



• Proposals welcome for LP'13 & ICHEP'14.

IUPAP Commission on Particles and Fields (CII)



Looking ahead to future CII sponsored conferences

- Technology and Instrumentation in Particle Physics
 - TIPP'II planned, hosted by Fermilab
 - TIPP'14 proposals will be considered next year
- International Particle Accelerator Conference
 - IPAC'10 May 23-28, 2010 in Kyoto, Japan. (1st)
 - IPAC'II in San Sebastian, Spain 5-9 September 2011
 - IPAC'12 in New Orleans, Louisiana 20-25 May 2012



- International Conference on Neutrino Physics and Astrophysics
 - Neutrino 2010 (Athens, Greece) June 14-19, 2010
 - <u>http://conferences.phys.uoa.gr/Neutrino2010/</u>
 - Neutrino 2012 (Kyoto, Japan)

IUPAP Commission on Particles and Fields (CII)



Young Scientist Prize

The Commission on Particles and Fields (C11) of IUPAP solicits nominations of outstanding young experimental or theoretical particle physicists for the two 2010 Young Scientists Prizes.

The prizes, consisting of an IUPAP medal, and a small cash award, will be presented at the 35^{th} International Conference on High Energy Physics, Paris, France July 21 - 28, 2010.

Candidates for the prize must have a maximum of 8 years of research experience (excluding career interruptions) following the PhD. Nominations can be made by experimental or theoretical particle physicists who know the work of the nominee well. A nomination should consist of a letter explaining the nominee's qualification and scientific achievement, a complete CV and list of publications.

Materials should be sent by postal and electronic mail to the CII Commission Chair by February 1, 2010.



Conclusions

- CII Website: <u>iupapcII.org</u>
- CII Document database: <u>http://docdb.fnal.gov/CII/</u>
- The large summer conferences (LP and ICHEP) are part of the tradition of the particle physics community. As the needs of the community change, the conferences may need to adapt. CII will be requesting your input on how best to evolve the format and planning for the large international meetings.
- Your ideas and feedback are always welcome.
- Many, many thanks to the local organizers and to DESY for hosting LP09.
- See you at ICHEP in Paris in 2010 and at Lepton Photon in Mumbai in 2011.



Palais de Congres in Paris - site for ICHEP 2010



IUPAP Commission on Particles and Fields (CII) - iupapcII.org

Saturday, August 22, 2009



More information

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IUPAP CII Mandate continued

Art 4: To organize where feasible the award of medals or other testimonials of excellence in its field.

Art 5: To publish where feasible newsletters, circulars, occasional books, journals or handbooks in its area.

Art 6: To maintain liaison with other IUPAP Commissions, with the Commissions or Committees of other Unions or of the International Council of Scientific Unions (ICSU) or other scientific organizations, with a view to collaborating and cooperating in sponsoring joint conferences and to participating in joint projects when need arises.

In particular to maintain close liaison with the General Commissions of IUPAP (SUNAMCO, Physics Education and Development), so as to ensure suitable input from its field into these physics-wide activities.

Art 7: To make available to each General Assembly of the Union a summary of activities and progress in its field since the previous Assembly.



2008 IUPAP Resolutions

Resolutions of the 2008 IUPAP General Assembly in Tsukuba:

1. That the IUPAP member fees will remain at 1850 euros per share for the period 2009-2011.

2. That the **size of the Commissions** will be increased from 13 to 14.

3. That IUPAP partner with **UNESCO** and sign the "**Memorandum of Cooperation**" as revised and presented to the General Assembly. <u>(Full resolution)</u>

4. That the slates of candidates for Commission members and IUPAP Officers be adopted.

5. That the "**IUPAP Statement on Universality of Science**" be adopted. <u>(Full</u> statement)

6. That the "Resolution on the **Importance of Active Learning and Hands-on Physics Education**" be adopted. (Full resolution)

7. That the "Resolutions from the Conference on **Women in Physics** in Korea," as reported to the 2008 General Assembly, be adopted. <u>(Full resolution)</u>

8. That IUPAP endorses the recommendations concerning the **redefinition of the SI units** made by the Consultative Committee for Units (CCU) to the General Conference on Weights and Measures (CGPM) at its meeting in November 2007. <u>(Full recommendations)</u>

9. That the resolution endorsing SESAME be adopted by IUPAP. (Full resolution)