

## Minutes of the Meeting of the IUPAP Commission C11

Beijing, August 18, 2004

32<sup>nd</sup> International Conference on High Energy Physics.

**Present:** V. Lüth (Chairperson), M. Turala (Secretary), R. Godbole, G. Herten, T. Huang, A. Sissakian, S. Stapnes, G. Wormser, T. Yamanaka, S. Bertolucci (representing E. Iarocci)

**Guests:** H. Chen (IHEP Beijing), J. Dorfan (ICFA), T. Ekelof (Univ. Uppsala), G. Kozlov (JINR Dubna), P. Langacker (Univ. Pennsylvania), C. Newman-Holmes (FNAL), R. Rubinstein (ICFA), Dongchul Son (Kyunkpook Nat. Univ.), C. Tully (Princeton Univ.)

**Apologies:** A. Smith (Vice-Chair), C. Fosco, E. Iarocci, M. Zeller, E. Zas (C4), D-O. Riska (C12), A. McDonald (C19).

### Agenda

1. Welcome to C11 members and guests.
2. Adoption of Agenda
3. Approval of Minutes of the 2003 C11 Meeting at Fermilab
4. Chairman's Report V. Lüth
5. Report from ICFA R. Rubinstein/ J. Dorfan
6. Report of the LP03 (Fermilab) C. Newman-Holmes
7. Report on present conference (ICHEP04) H. Chen
8. Preparations for LP05 in Uppsala T. Ekelof
9. Preparations for ICHEP06 in Moscow A. Sissakian
10. Proposals for future ICHEP and LP Conferences.
  - a. ICHEP08 in Philadelphia P. Langacker
11. Authorship in large collaborations discussion
12. Any Other Business
  - a. LP07 in Daegu written update
  - b. reports from C4, C12 and C19 commissions written reports
  - c. future conferences expressions of interest

The Agenda and all presentations and reports were distributed to the participants ahead of the meeting.

1. **V. Lüth welcomed all members and guests**, and she asked to introduce each other.
2. **The agenda** of the meeting was agreed with minor modifications to the original one (presentation on ICHEP04 was moved ahead of the report on LP03, expressions of interest on future conferences were added under AOB).
3. **The draft minutes** of the C11 meeting at Fermilab were approved with minor corrections by V. Lüth (concerning LP07).

#### 4. Chairperson's report

Vera Lüth explained the position of C11 in the framework of the international science organization:

- International Council of Science – ICSU, <http://www.icsu.org>,
- International Union of Pure and Applied Sciences – IUPAP, <http://www.iupap.org>,
- C11 Commission on Particles and Fields - <http://www.ifj.edu.pl/IUPAP/iupap-c11.html>),
- National Contacts - NC.

She presented the present composition of C11 and reminded about Specific Guidelines on terms and regional distribution, particularly in view of the forthcoming elections of new C11 members, which will be one of the topics of the next C11 meeting (2005) – suggestions concerning candidates for the chair, the secretary and new members are welcomed (an e-mail on this matter will follow). Nominations should be submitted to the IUPAP Secretary by the national IUPAP Liaison Committees or the High Energy Physics Divisions of the Physical Societies in various IUPAP member countries.

V. Lüth presented briefly two C11 committees:

- ICFA – International Committee for Future Accelerators  
(chaired by J. Dorfan; <http://www.fnal.gov/directorate/icfa>) and
- PANAGIC – Particle and Nuclear Astrophysics and Gravitation Committee  
(chaired by A. Bettini – <http://www.lngs.infn.it/site/exppro/panagic>), to which C11 should nominate a representative (an e-mail on this matter will follow - any volunteer?);  
Mike Zeller (USA) has recently accepted this role.

V. Lüth made a brief summary on the role of IUPAP and C11 in respect to the international conferences, ICHEP and LP, and presented short list of recent conferences in these series that took place and those who are approved in future years (LP05 in Uppsala, ICHEP06 in Moscow and LP07 in Daegu).

The problems with USA visas, which had severe impact on the participation of physicists of several countries at LP03 (in particular Chinese and Russians), still remain, in form of complex, lengthy, and opaque procedures. Various proposals, including one by leaders of the major science organizations are being evaluated by US government agencies, and there is hope that some of them will be implemented. Consistent with its mandate, IUPAP has advised that it will not sponsor any conference in the USA until free access of scientists can be guaranteed.

T. Yamanaka informed that National Committee for Physics under Science Council of Japan, and the IUPAP Section underneath it jointly sent a letter concerning the US visa problem to John H. Marburger, Director of Office of Science and Technology Policy, supporting the letter from Yves Petroff, and asking the U.S. to solve the visa problem. Also, the president of ICSU, Jane Lubchenco send a letter to George Atkinson, the Science and Technology Advisor to the US Secretary of State (June 10, 2004) expressing grave concern about the continuing restrictions on Scientists' participations in research, meetings, and conferences resulting from the current US visa policies.

V. Lüth has initiated a discussion, supported by the C11 members, on the Authorship in Large Collaborations – this issue was discussed separately under item 11 of the Agenda.

V. Lüth informed about the World Conference on Physics and Sustainable Development, which will take place in Durban South Africa, Oct. 31<sup>st</sup> – Nov. 2<sup>nd</sup> ([www.wcpsd.org](http://www.wcpsd.org)), sponsored by IUPAP, UNESCO and ICTP, as well as the South African Institute of Physics, as part of the celebration of 2005 as the Year of Physics.

A short discussion, with the participation of G. Herten, T. Ekelof, G. Wormser and R. Godbole followed, addressing the involvement of particle physics community and better communication (V. Lüth will make short presentation on Sunday).

V. Lüth also listed other Activities and Events of Interest:

- “InterActions” (<http://www.interactions.org/cms/>) – world-wide PR from 17 HEP institutions,
- Support for science education K-12 (<http://www.k12.com/>)
- Encouragement of YPP – Young Particle Physicists (<http://ypp.hep.net>),
- World Year of Physics and HEP involvement (<http://www.physics2005.org>)
- Data Grid Developments (<http://lcg.web.cern.ch/LCG/>, <http://www.ivdgl.org/grid2003/>),
- International LC Developments – Report from ICFA, Recommendations on LC Technology (<http://www.interactions.org/linearcollider/>).

## **5. Report from ICFA**

The report on ICFA was presented by the ICFA secretary Roy Rubinstein; details can be found in the distributed paper on “Activities of ICFA, July 2003 – August 2004” (by R. Rubinstein).

During the past year two ICFA meetings were held: on 15 August 2003 during the Lepton-Photon Symposium at Fermilab, and on 12/13 February 2004 in Paris. At the Paris meeting, directors of the major world particle physics laboratories were also invited, which allowed a broader discussion on the current status and future possibilities of particle physics.

Concerning the Linear Collider, ICFA has played a leading role in planning its realization as a global facility. The International Linear Collider Steering Committee (ILCSC) has been formed to promote the construction of a linear collider through world-wide collaboration. In late 2003, ICFA formed the International Technology Recommendation Panel (ITRP), which is to recommend a single technology option at the ICFA /ILCSC meeting this week.

ICFA set up a Task Force to make recommendations on a framework for an international organization that will develop the global design of the International Linear Collider – a report was produced in March 2004, recommending the formation of a Global Design Initiative (GDI), which will turn the selected technology into a conceptual and then a construction-ready design. Efforts are currently underway by ICFA to find a host laboratory for the GDI, nominate a director, and to draft Memoranda of Understanding (MoU) between the participating institutions.

In February 2004, following the statement of OECD science ministers on a Linear Collider, ICFA issued a statement welcoming the ministerial statement and reaffirming that a Linear Collider remains the highest priority new machine for the field (copy distributed to C11).

ICFA has formed a new Panel: the International High Energy Physics Computing Coordination Committee (IHEPCCC), which primary mission is to act as a forum for persons in charge of particle physics computing; the current ICHEPCCC chair is G. Wormser (Orsay).

ICFA heard several reports of its panels and committees (Instrumentation, Beam Dynamics, and Advanced and Novel Accelerator Panels, Standing Committee on Interregional Connectivity) – some details could be found in the provided written report.

J. Dorfan complemented the presentation informing C11 briefly about the work of the panel on the technology choice for the linear collider, lead by B. Barish. ICFA will hear and discuss the recommendation on Thursday. It will be announced in the plenary session on Friday (20 August 2004) – a historical moment... ICFA notices increased interests of governments and funding agencies in the future machine, although problems of hosting, financing and managing of such global installation are recognized.

## **6. Report on ICHEP04 (Beijing)**

HeSheng Chen reported on the status of the ICHEP04 conference.

There are about 870 people who have registered for the conference (about 660 from abroad, 42% from Asia, 23% from America, 34% from Europe); up to Tuesday, 726 people actually arrived in Beijing (510 from abroad). More arrivals are expected by 20 August.

The conference is arranged in six working days with one day for rest. As to the scientific program, topics for plenary sessions have been selected on the basis of the most recent developments in the fields with some considerations given to regional balance. The responsibilities for selecting topics for parallel sessions have been largely given to the session conveners who have full authority in organizing topics in his/her session. In general, there has been very good input from the Scientific

Programme Committee, but in many cases replies came too slow. There are more than 300 talks at the 13 parallel sessions – where young scientists are well represented, and 27 plenary talks. The poster session is joined by 19 laboratories.

The overall ICHEP budget is about 300 kUSD, and the cost appear to be well matched to the funding available. The income includes about 240 kUSD coming from the registration fees, and about 60 kUSD from various agencies (including IUPAP); the expenditures include support to the participants (about 35 kUSD for delegates from China and other Asian countries, Eastern Europe, Latin America to support their local expenses and/or to waive the conference fees). Also included is the organization of various meetings, e.g. C11, ICFA, InterActions, etc. (about 6 kUSD).

There was a question on mini-reviews at parallel sessions; they were not always easy to organize. This should be kept in mind for future conferences.

Some discussion developed concerning the distribution of information on the conference via national contacts. Apparently it has not been done, as the quotas were not applied – they are recommended only as guidelines.

***Recommendation to the conference organizers: use national contacts for the dissemination information on the conference and registration.***

***Action on V. Luth and M. Turala: to review and update the list of national contacts: Azerbaijan, Latvia, Uzbekistan, Romania, Czech Republic, Bulgaria, Hungary, and others.***

## **7. Report on LP03 (Fermilab)**

Cathy Holmes-Newman reported on LP03.

The conference was attended by 645 persons, of which 264 came from outside of the United States (about 50-60% of those invited). The Lepton Photon Symposia have only plenary talks, however, to increase the participation and interactions between the attendees, breakout sessions, poster sessions, and a special session on Grid computing were added.

Speakers included 18 each from USA and Europe, 3 from Latin America/ Canada, 6 from Asia, Middle East and the former Soviet Union countries. Among the session chairs there were 7 from USA, 1 from Latin America/ Canada, 3 from Europe, 6 from Asia, Middle East and FSU. Participation by women was about 20%, but the International Advisory Committee had only 2 women out of 22 members. Participation of young physicists was encouraged by organization of the poster session and reduced fee for the presenters – about 70 posters were displayed. Young Particle Physicists had a meeting in the evenings

Several Outreach and Education events took place during the conference:

- LP03 web site led to the “plain English” Particle Physics,
- Public Information Officers and Media Representatives were invited for Unveiling of Interactions web site, press panels on b physics, neutrinos, Grid computing, exotic physics; also Lab Directors meet the press,
- At the Field Museum in Chicago several physics demonstrations were held and CDs about particle physics were given away.

The proceedings were completed very quickly, thanks to outstanding job of the editors, H.W.K. Cheung and T.S. Pratt (articles on web site in December 2003, DVD ROMs available in January 2004, books available in February 2004).

The total cost of the conference was 463.2 kUSD, well balanced with the available funds. Funding from US DOE, NSF, IUPAP and URA allowed the organizers to provide financial support for many attendees (fee waived 53, partial waivers 6, poster presenters 57, scientific secretaries and tour guides 35). Travel support was provided for 23 participants from various countries of Asia, Latin America, Eastern Europe, FSU, South Africa. Attendees from US Department of Energy (DOE) or DOE Labs paid a reduced registration fee.

The conference was originally planned for 800 participants, but ended up with 645; in some part this was due to difficulties getting US visas in time for Chinese, Russian and citizens of some other countries.

The members of C11 congratulated C. Newman-Holmes and the organizers for the excellent conference and the timely issue of the proceedings.

*Recommendation for future LP symposia organizers: plan for poster sessions to ease the participation of young physicists.*

## **8. LP05 in Uppsala**

Tord Ekelof reported on the preparations for 22<sup>nd</sup> LP05, which will take place from 30 June to 5 July 2005 in Uppsala (<http://www.uu.se/lp2005>). He presented the International Scientific and the Local Organizing Committees, as well as the tentative program and the schedule of the preparations. The presentation was complemented by the information on the local facilities (about 15 lecture halls, including the Main Auditorium for 1800 people and three halls with about 250 seats), on hotels and dormitories (costing from 30 to 120 Euros) – which have been already reserved, local attractions and finally on the activities of Uppsala physics groups.

The following discussion focused mainly on the proposed schedule, some dates of which looked as hard to match, particularly in view of the holiday season, and on “mini-reviews”, which are more and more used. All agreed that invited speakers should be contacted soon, and that the International Scientific Advisory Committee should be consulted on these matters without delay – perhaps arranging “topical working groups” (using e-mail and/or phone conferences).

Concerns were expressed about relatively high registration fee (410 Euros for early registration) – an extra charge for banquet was suggested; opportunities for students (lower fees and cheap accommodations) should be indicated on the conference web pages.

## **9. ICHEP06 in Moscow**

Aleksey Sissakian reported on the preparations for ICHEP06. It will be a first “Rochester” conference in Moscow, organized jointly by the Joint Institute of Nuclear Research (Dubna), the Russian Academy of Sciences, the Ministry of Science and Education of Russian Federation, the Atomic Energy Agency of Russian Federation and the Moscow State University. The dates are: July 26 – August 2, 2006, with Sunday, 30<sup>th</sup> July, as a free day.



The suggestions for the International Programme Advisory Committees was presented and discussed – it was said, that these committees should include, persons who are actively involved in experimental and theoretical research (and as such have close contacts with younger researchers) and who could devote some time to work with the organizers on the program.

***It was agreed that the composition of these committees will be discussed further by the Organizers and the C11 Chair.***

The conference will take place in the premises of the Russian Academy of Sciences, which are situated in the center of Moscow, with an easy access by the public transportation (close to the “Leninsky Prospekt” underground station), and which contain five lecture halls for parallel sessions (seating 1300 in total) and a main lecture hall (1200 seats) for plenary sessions; in addition many small meeting rooms, computer facilities, poster session hall, coffee break hall, science library and self-service restaurant/coffee-shop are available. There are ample lunch facilities within the RAS building, as well as a number of cafes and restaurants in the neighborhood. Concerning lodging, there are several hotels in the conference area, but one can also book hotels in the center of Moscow (prices varying from about 50 to 250 USD per night); cheaper accommodations for students are possible. The program of the social activities is in preparation.

The actions for the coming months include:

- Applying for fundings,
- Setting-up conference web pages
- Designing the ICHEP06 poster
- Finalizing the list of the International Programme Advisory and Local Organizing Committees,
- Contacts publishing companies for the proceedings

## **10. Proposals for future ICHEP and LP Conferences.**

V. Lüth informed participants that she has received expressions of interests for the organization of future ICHEP and LP conferences from USA (ICHEP08, Philadelphia), France (ICHEP10, Paris), Germany (Heidelberg and Hamburg), India/Pakistan.

#### **a. ICHEP2008 in Philadelphia**

A possibility of organizing ICHEP2008 by the Princeton University and the University of Pennsylvania was discussed with V. Lüth with the local communities of physicists. In response a letter, signed by the physicists of the University of Pennsylvania, the Princeton University and the Institute of Advanced, has been prepared, in which they have expressed “an enthusiastic wish to host the conference”. As the result the community has been asked to make a short presentation at the C11 meeting.

Paul Langacker presented the community of physicists at the University of Pennsylvania, the Princeton University and the Institute for Advanced Study, which is behind the proposal; the chairs will be A.J.S. Smith and N.S. Lockyer. It is suggested to organize the conference at the University of Pennsylvania, which has sufficient infrastructure (Irvine Auditorium for 1260 seats, and five meeting rooms of capacity from 200 to 340; in addition a number of smaller ones 10-100 seating capacity), with a help of professional university conference coordination group, which has experience in the organization of large conferences. Paul also presented Pennsylvania and Philadelphia, their tourist attractions, as well accommodations (including cheaper campus lodging) and transportation facilities

Questions regarding the conference date and availability of dormitories: – early August should not be a problem. More serious issue is related to US visas; however there is a hope that next years this problem will be gone.

It has been agreed that the recommendations on ICHEP08 will be taken at the 2005 C11 meeting.

### **11. Authorship in Large Collaborations**

Vera Lüth briefly introduced the issue. The general feeling is that the present author lists:

- do not appropriately credit those who contributed most,
- do not allow others to identify those most knowledgeable,
- lead to absurd publication and citation records.

Drafts of ATLAS and CMS documents on the authorship policies have been distributed

It is clear that the author list must those who performed the physics analysis, however, also those scientists who contributed technical work and who operate experiments. The committee members agreed that the present situation is not “healthy”, however, they also recognized the scale of the problem, and that nothing could be done without an active involvement of large collaborations the issue is considered important and worth of an effort. It was said that this issue should be presented to the LHC collaborations soon, as they are forming their publication policy now; their reaction is not necessarily positive, however, it is worth to form a working group, which will include few members of C11, representatives of large collaborations and few “wise persons”, who will discuss the issue and come up with suggestions, what could be improved and how.

The matter was discussed further at a dedicated meeting organized by V. Lüth during the ICHEP04 conference, in which representatives of large collaborations and C11 participated.

## **12. AOB**

### **a. LP07 in Daegu**

A status report on the preparations for Lepton-Photon Symposium 2007 in Daegu (Korea) was provided by Dinschul Son in a form of PowerPoint presentation; it was not discussed. It contains details concerning the venue and date (proposed: 13-18 August, 2007), sponsors and organization, rough timetables, as well as information on the location, local transportation and lodging, tourist attractions.

It is planned that detailed discussion will take place at the next C11 meeting in Uppsala.

### **b. Reports from C4, C12 and C19**

Written reports from C4 (Cosmic Rays), C12 (Nuclear Physics) and C19 (Astrophysics) have been provided by E. Zas, D-O. Riska and A. Mc Donald respectively; they were not discussed. They are available at the C11 internal web pages.

### **c. Future Conferences – expressions of interests**

A proposal for holding a major HEP conference (LP09 or ICHEP10) in India has been submitted by R. M. Godbole, Centre for High Energy Physics, Indian Institute of Science, Bangalore, India. The document was distributed to the participants, however it was not discussed – it is available at the C11 internal web pages, and it will be considered in due time.

### **Recommendations**

- 1.04. Organizers of LP and ICHEP conferences  
Use the national contacts for the dissemination of information on the conference being organized and to encourage early registration
- 2.04. Organizers of LP symposia  
Plan for poster sessions, to ease the participation of young physicists.

### **Actions**

- 1.04 V. Lüth  
Issue an e-mail concerning candidates for future C11 chair, secretary and members.
- 2.04 V. Lüth  
Issue an e-mail concerning C11 representative to PANAGIC (M. Zeller was nominated)
- 3.04. V. Lüth and M. Turala  
Update the list of national contacts.
- 4.04. V. Lüth and A. Sissakian  
Discuss further the composition of the International Advisory Committee for ICHEP2006.

Draft by M. Turala

With corrections by V. Lüth