

Minutes of the Meeting of the IUPAP Commission C11

Fermilab, August 13, 2003

21st International Symposium on Lepton and Photon Interactions at High Energies.

Present: V. Lüth (Chairperson), M. Turala (Secretary), R. Godbole, G. Herten, D-O. Riska (C12), G. Wormser, T. Yamanaka, M. Zeller, J. Lee-Franzini (representing E. Iarocci)

Guests: M. Bardeen, Dongsheng Du, T. Ekelof, G. Feldman, G. van Middelkoop,

C. Newman-Holmes, Sun Kun Oh, R. Rubinstein, Dongchul Son, A. Wagner

Absent: A. Smith (Vice-Chair), T. Huang, E. Iarocci, A. Sissakian, S. Stapnes, A. McDonald (C19).

Agenda

1. Welcome to C11 members and guests.
2. Adoption of Agenda
3. Approval of Minutes of the 2002 C11 Meeting in Amsterdam
4. Chairman's Report V. Lüth
5. Report from ICFA J. Dorfan / R. Rubinstein
6. Report of Subpanel on the ICHEP Format G. Wormser
7. Report of the ICHEP02 (Amsterdam) G. van Middelkoop
8. Report on present conference (LP03) C. Newman-Holmes
9. Preparations for Future Conferences
 - a. ICHEP04 in Beijing H. Chen
 - b. LP05 in Uppsala T. Ekelof
 - c. ICHEP06 in Moscow A. Sissakian
10. Proposals for future ICHEP and LP Conferences.
 - a. LP07 in Hamburg A. Wagner
 - b. ICHEP08 in Boston G. Feldman
11. Report from C12 (Nuclear Physics) D-O. Riska
12. Educational Programs at Fermilab M. Bardeen
13. Any Other Business

The Agenda and reports received before the meeting were distributed to the C11 members.

1. **V. Lüth welcomed all members and guests**, and she asked to introduce each other, particularly in view of recent changes in C11 composition.
2. **The agenda** of the meeting was agreed with an addition of “US visa matters” under AOB.
3. **The draft minutes** of the meeting in Amsterdam were approved with minor corrections by G. van Middelkoop.

4. **Chairperson’s report**

V. Lüth reported about the meeting of the IUPAP Council held at the ICTP in Trieste, January 24-25, 2003. In view of the recent changes in C11 membership she presented an overview of the IUPAP activities and organization (<http://www.iupap.org>; <http://www.icsu.org>), including various working groups

Communication in Physics – <http://www.iupap.org/working.html#communication>;

Facilities for Condensed Matter Physics - <http://www.iupap.org/working.html#facilities>;

Women in Physics – <http://www.if.ufrgs.br/%7Ebarbosa/women.html>.

At the Trieste meeting special attention was given to the World Year of Physics 2005, which is to commemorate the 100th anniversary of A. Einstein’s legendary papers (see: <http://213.169.191.188/index.html>).

V. Lüth also summarized the activities of the C11 commission and its organization (<http://www.ifj.edu.pl/IUPAP/iupap-c11.html>). Important committees are

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>).

A quick overview of the past and future IUPAP approved ICHEP and LP conferences was presented. In the coming years ICHEP04 will take place in Beijing, LP05 in Uppsala, and ICHEP06 in Moscow. C11 has received proposals for LP07 in Daegu (Korea) and in Hamburg, and for ICHEP08 in Boston.

A problem with USA visas was brought by V. Lüth to the attention of C11 members and the guests present - this matter was further discussed under AOB.

A copy of the chairperson C11 report, submitted to the IUPAP meeting at Trieste, was distributed to the C11 members. It is also expected that every new member of C11 has received, or will receive, the IUPAP booklet.

5. Report from ICFA

The report on ICFA was presented by the ICFA secretary R. Rubinstein; details can be found in the distributed paper on “Activities of ICFA, July 2002 – July 2003”.

During the past year three ICFA meetings were held: on 30 July 2002 in Amsterdam, on 10 October 2002 at CERN and on 13/14 February 2003 in Tsukuba.

The International Linear Collider Technical Review Committee, chaired by G. Loew, presented the Executive Summary of the report at the February 2003 ICFA meeting, which states that “... there appeared to be no insurmountable obstacles in building TESLA, NLC/JLC (X) and JLC (C) in the next few years, and CLIC in the more distant future...”.

The International Linear Collider Steering Committee, chaired by M. Tigner, produced a “Consensus Document” on the scientific case for a Large Linear Collider, this document is aimed at non-HEP scientists. Planning for a Global Linear Collider Center for the design and construction is progressing. A committee of “wise persons” will be formed to recommend the linear collider technology.

ICFA representatives are invited to the meetings Global Science Forum Consultative Group on High Energy Physics, made up of representatives of QECD countries, to discuss the future of particle physics. A statement on the linear collider has been drafted by the Consultative Group for a meeting of QECD science ministers to be held in February 2004.

The ICFA seminars are held every three years, to allow for exchange of information and

discussions on future facilities for particle physics. The 7th ICFA seminar was held on 8-10 October 2002 at CERN; the next one will be hosted by Korea at the Center for High Energy Physics, Daegu, in 2005.

ICFA is also very concerned about difficulties in obtaining visas for scientists to visit the US. Letters expressing concern were sent to J. Marburger (the Science Advisor to the US President) and R. Orbach (Head of DOE Office of Science).

ICFA has noted that over the past decade, it appears that funding for particle physics is decreasing in most regions of the world – it was decided to collect information on resources and funding for HEP in various regions of the world.

6. Report of C11 Subpanel on ICHEP format

V. Lüth and G. Wormser reminded that after the 2002 meeting in Amsterdam, following a recommendation by ICFA and a letter in 2001 by B. Foster on behalf of SOLEP, C11 decided that various aspects of the ICHEP conference series should be reviewed. A C11 subpanel, composed of T. Huang, P. Kalmus, V. Lüth, A. Sissakian, M. Turala, G. Wormser (chair), was set-up and this panel discussed matters via e-mails and phone.

The subpanel's recommendations refer to

- Poster sessions, to enlarge scientific content and encourage young scientific participation,
- Mini-reviews (but avoiding « professional averagers »),
- Specific actions to enhance the participation of younger physicists,
- More time for discussions in the parallel sessions, and
- Preparation of plenary sessions,

Conference preparation should include:

- Internet submission of contributed papers (with attention to the needs of large collaborations with many authors and contributions),
- Intensive consultations with the Program Advisory Committee (discontinue a separate International Advisory Committee); C11 should be consulted on its membership.

During the conference

- Adaptation of the new technologies (internet, LCD projectors, etc.).

A draft of the sub-panel recommendations was available to the C11 members ahead of the meeting, and copies have been also distributed to everybody attending the meeting. In general it was felt that the recommendations follow a “common sense” approach, however some formulations need some fine tuning. It was decided to distribute the list of original questions which have been addressed by the panel to all C11 members and conference organizers. Comments and corrections to the draft document on “Recommendations for ICHEP Format by C11 Subpanel” (dated 6 June 2003) should be sent by e-mail to G. Wormser by September 15th.

7. Report on ICHEP02 (Amsterdam)

G. Van Middlekoop reported on ICHEP02 on behalf of the Local Organizing Committee; copies of his written report have been distributed to the C11 members. A copy will be forwarded to IUPAP.

The 31st International Conference on High Energy Physics took place at Amsterdam from July 25th through 31st, 2002. The conference was hosted the Netherlands’ Institute of Particle Physics (NIKHEF); the venue was RAI Congress Centre. In format the conference was similar to earlier versions: contributed papers were presented in four parallel sessions during each of the first three days, followed a Sunday free of program, and by three days of review plenary talks.

The scientific program had been defined by the Program Committee, in consultation with the International Advisory Committee. Altogether 13 topics were selected. Parallel sessions with contributed papers were organized for each of these topics. The topics were also covered in invited review talks during the plenary sessions. Of about 1000 abstracts submitted, approximately 750 were selected for oral presentations. After initial consultations with the Program Committee, the session conveners were given freedom to arrange their sessions. All presentations were available on the Conference web pages on the day following the presentation.

There were 951 registered participants, including local PhD students, who also served as assistants to the sessions. Participants came from 47 countries (the largest delegations were from

USA, Germany, The Netherlands, Italy, Switzerland, UK, Japan, Russia). 109 delegates requested financial support, 69 requests were approved.

The Conference Proceedings were prepared on a CD-ROM for all participants (distributed in July 2003) and sent in a paper form to all major physics libraries in the world (the plenary talks were issued as a volume of Nuclear Physics B).

On the financial side, the Conference budget was balanced without deficit, which was possible due to sponsorship by IUPAP and many Dutch Universities, the major Dutch Funding Agencies (FOM and NOW), the Ministry of Education and Science, and several foundations and companies.

Several problems and/or issues have been identified by the Conference organizers and members of C11 – they provided an input to C11 sub-panel discussions on the ICHEP format:

- role of advisory bodies,
- national quotas,
- list of participants,
- format of proceedings.

The report was accepted by the C11 Committee and the Chair congratulated organizers for a very successful Conference.

8. Report on LP03 (Fermilab)

C. Newman-Holmes reported on the status of the LP03 conference at Fermilab. The Local Organizing Committee includes about 25 staff. The scientific program - only plenary talks – was prepared with the participation of an International Program Committee. A special evening session on Grid Computing has been scheduled.

C. Newman-Holmes introduced the statistics for the participants (about 650), with specific discussion on the invitation process and quotas. She provided also information on speakers and session chairs, and on the participation of younger physicists (poster session, reduced fees for scientific secretaries and tour guides, the Young Particle Physicist

meeting). Funding from US DOE, NSF, IUPAP and URA allowed the organizers to provide support for a number of attendees. Recent regulations on US visas prevented a number of physicists, in particular from China and Russia, from attending the Conference (see AOB below).

The accompanying discussion addressed mainly the issue of communication with national representatives and the national quota. It was decided that C11 members should get in touch with the representatives of Chile, Dubna, Portugal, Puerto Rico, and Romania to improve the response. The national quotas should be used only as a general guideline, but not strict limit for the number of invitations for a given country.

9. Preparation for Future Conferences

a. ICHEP04 in Beijing

In the absence of H. Chen, who could not come to the Conference and to C11 meeting because of the US visa problem, the plans were presented by Dongsheng Du (one of the co-chairs of the ICHEP04 Organizing Committee).

The date of the Conference is 16 – 22 August 2004, with a traditional format of three days for parallel sessions and three days for plenary sessions, separated by a free day. The Beijing International Convention Center (BICC) has been selected as the conference venue and a contract has been signed. The International Advisory Committee, the Scientific Program Committee and the Local Organizing Committee have been set up. A poster and web pages are ready (<http://ichep04.ihep.ac.cn>). About 1000 rooms have been negotiated with several hotels that are in proximity of the BICC.

The C11 committee members advised that the information on the Conference location and dates and invitations should be announced soon to allow for an advanced planning. Also, the proponents need to submit a request for IUPAP sponsorship (funding) by September 15th, 2003, in time for a decision at the IUPAP council meeting in early October in Vancouver. Details can be found on the IUPAP web page.

b. LP05 in Uppsala

T. Ekelof reported on preparations for 22nd LP05 in Uppsala, which will take place from 30 June to 5 July 2005. He reported briefly on the conference venue, accommodations and local attractions. A Local Organizing Committee is being set up, it will be assisted by a professional “Academic Conference” organization. Conference site has been reserved and block reservations in hotels have been made. An International Program Committee is gradually being formed, taking into account recent discussions and recommendations by C11. The organizers plan to profit from the experience of the preceding LP and ICHEP conferences.

c. ICHEP06 in Moscow

Sissakian was unable to attend the C11 meeting, however he submitted to C11 a short written report on the preparation for ICHEP06 in Moscow. The preparations are advancing well, including formation of a local conference consortium and an organizing committee. The premises of the Russian Academy of Sciences are considered as the conference venue. It was agreed to ask A. Sissakian for a detailed presentation at the next C11 meeting during ICHEP04.

In regard to LP05, T. Ekelof has been asked to contact organizers of EPS and DPF conferences to avoid potential schedule conflicts (rather unlikely because of an early date of the Uppsala conference). A special session celebrating the Year of Physics at LP05 is strongly encouraged. The organizers are asked to proceed with the selection of the International Program Committee and submit the list of members to C11 for approval the end of this year.

10. Proposals for future ICHEP and LP Conferences.

a. LP07 in Hamburg

A. Wagner, in the name of DESY, proposed to hold LP07 in Hamburg. He reminded us that DESY has hosted LP symposia every ten years, in 1977, 1987 and 1997, and that 2007 will coincide with the end of the operation of HERA II. The Conference could be organized in the Congress Centrum Hamburg (CCH), and its program would largely follow the structure of the previous conferences in this series.

V. Lüth recalled that in 2002 a proposal for the organization of one of the next Lepton-Photon Symposia was presented by the Korean HEP community. The representatives of Korea, present at the C11 meeting, reaffirmed their strong interest to host the LP07 conference in Daegu (the proposal of 2002 has been distributed to C11 members and guests).

b. ICHEP08 in Boston

G. Feldman presented a proposal to host ICHEP08 in Boston, following a letter of intent submitted to C11 in 2002 in the name of Boston and Harvard Universities and the Massachusetts Institute of Technology. It is expected that the conference will be using the facilities of these universities, including inexpensive student dormitories for housing. The proposed date would be 2nd – 3rd week of June, to be compatible with the local academic activities.

The C11 members discussed the three proposals on future conferences. Concerning the LP07 symposium, it was felt that the argument of regional rotation strongly favors Korea. Still, the C11 members present at the meeting decided that the other members of the committee should be asked for their opinion, before a final decision is made.

As to the proposal by the Boston universities for ICHEP08, the C11 members view the location and proposed venue very favorably, however the date proposed collides with academic duties in many countries. Therefore the proponents will be asked to consider alternate dates, either in July or August.

11. Report from C12 (Nuclear Physics)

D-O. Riska presented the IUPAP Commission on Nuclear Physics (C12), with Shoji Nagamiya (KEK) as the chair and W.T.H. van Oers (TRIUMF) as the secretary; M. Zeller represents C11 as an associate member.

The 2003 Meeting of C12 took place on June 6, at Duke University; Chinese and Russian delegates did not receive their US visas in time to attend the meeting.

The IUPAP C12 sponsors many different conferences:

- INPC2004 – general nuclear physics conference,
- SPIN2004 – high energy nuclear physics,
- PANIC2005 – particle and nuclear physics,
- FB18 (2006) – few body problem in nuclear, hadron and atomic physics,
- MENU-10 (2003 shifted to 2004) – meson-nucleon physics.

Several new facilities are currently being designed or are under construction:

- GSI (Germany) – Multipurpose: hadrons, antiprotons, radioactive beams,
- J-PARC (Japan) – Multipurpose: nuclear and particle physics,
- ISAC-II (Canada) – Ion beam facility/upgrade
- RIKEN (Japan) –

Others facilities are in the planning phase:

- RIA (USA) – radioactive beam facility
- JLAB (USA) – 12 GeV upgrade of existing 6 GeV CEBAF

12. Educational Programs at Fermilab

M. Bardeen presented the K-12 Education Program at Fermilab: Science in the Neighborhood and the Nation. The specific program

- researches, designs and conducts programs that maintain science education at the highest levels for students at all levels from kindergarten through high school,
- promotes the integration of innovative educational technologies into the curriculum,
- promotes the use of high-quality science materials & resources.

Teachers and scientists are working together; the Lederman Science Center at Fermilab is a resource for teachers and schools. Workshops and institutes include:

- QuarkNet: High School Physics Research
- LInC: K-12 Web-integration Course
- Field trip-based workshops
- Technology Integration Workshops

Research appointments cover: Fermilab Teacher Fellowship, Teacher Research Appointments and Preservice Teacher Internships, as well as High School Internships.

Children are welcomed at Fermilab for classroom units and field trips and for classes for kids and families. The Teacher Resource Center provides: Collections, an Online Catalog, Consulting, Technology Workshops, Partnership with US DOE. Web-based Materials include: Online Instructional Projects, Particle Physics Data, Fermi Labyrinth - a virtual field trip, Prairie Data. Resources for Scientists (for *Sharing Science with Children*) include: Reference Collection, Instructional Materials, websites, classroom visit activities, hands-on exhibits.

International Connections include: Web-based Materials, Assisting/Collaborating with Scientists, QuarkNet, GRID Computing.

Statistics for 2002 FY:

- over 21,000 students and 5,600 teachers participated in Fermilab programs. Participants teach in 34 US states, Washington DC and Puerto Rico,
- over 50 educators taught in the programs, and over 200 scientists, engineers and technicians volunteered.
- The education office staff has 11 FTEs and 20 on-call docents.

The success is due to:

- Partnerships with educators
- Fermilab support from the director down
- External support from “ Friends of Fermilab “

13. AOB

The difficulties of obtaining US visa have become a problem of great concern to all scientists. A few steps have been already taken and/or planned:

- a) V. Lüth has contacted US National Academy of Sciences, and the NAS and several influential individuals have tried to intervene on behalf of several invitees to the LP03 conference and members of C11 and ICFA.
- b) C11 will formulate a letter to IUPAP, to be discussed at the IUPAP Council Meeting in Vancouver in October. It was agreed to collect all known cases of late delivery or refusal of visa, to demonstrate the seriousness of the problem. This will be done in collaboration with Fermilab and the NAS.

Draft by M. Turala
with corrections by V. Lüth