

Minutes

of the Thirty-Second Meeting of the Nuclear Physics European Collaboration Committee

(NuPECC)

held on August 21 / 22, 1998, in Groningen

Participants:

- T. Døssing
- J. Durell
- A. Fonseca
- S. Galès (Chairman)
- D. Guerreau
- M. Harakeh
- M. Huyse
- J. Jastrzebski
- G.-E. Körner (Scientific Secretary)
- H. Leeb
- M. Lozano
- R. Malfliet (ECT*)
- J. Martino
- G. van Middelkoop
- A. Shotter
- Ö. Skeppstedt
- H.J. Specht
- A. Wagner
- A. van der Woude (EPS)

J. Äystö, E. Fernández (ECFA), H. Karow (ESF), G. Løvhøiden, E. Migneco, G. Ricco, I. Sick and Th. Walcher could not attend.

Agenda

- 1.) Minutes of the Last Meeting
- 2.) Report of the Chairman
- 3.) Nuclear Physics News International
- 4.) NuPECC Handbook
- 5.) Public Awareness of Nuclear Physics
- 6.) Resources in Nuclear Physics
- 7.) NuPECC Study Group on Radioactive Beam Facilities
- 8.) NuPECC Study Group on Large Scale Computing
- 9.) New Initiatives
 - Search Committee for New Chairman
 - Re-use of LEP cavities for ELFE?
 - Concerted Action
- 10.) Miscellaneous
 - Letter from Uppsala
 - Inflation of Conferences and Workshops
 - AUSTRON
- 11.) Next meeting(s)

1. Minutes of the last meeting

The minutes of the thirty-first meeting are agreed upon with the following changes:

On page 4 in the second paragraph, „60“ has to be replaced by „600“

On page 6 in the second paragraph, the sentence „A detailed technical proposal including costs and time scales should be elaborated for the next meeting.“ has to be replaced by

„The Extended Scientific Council recommends that DESY includes ELFE@DESY as an integral part of the TESLA project provided that at the time of project submission:

- the physics programme remains world-wide unique
- the nuclear physics community supports the project and participates in its realisation
- a detailed technical proposal including cost, schedule and impact on DESY infrastructure is available.“

2. Report of the chairman

- S. Galès welcomes the new members D. Guerreau (Ganil Caen), M. Huyse (Leuven) and M. Lozano (Sevilla) as well as R. Malfliet, Director of ECT* from October 1, 1998. B. Schoch has been replaced by Th. Walcher (Mainz).

- Following the publication of the NuPECC Report, the ESF Scientific Secretary has sent a note to S. Galès, entitled "Clarification of the base line of the NuPECC Report". This note expresses mainly the concern of the ESF Board that it is not clear from the report that the advice and recommendations given represent the opinion of NuPECC and do not necessarily reflect the opinion of the ESF or its member organisations.

An insert clarifying note has been added to the copies not yet distributed and a clarifying statement will be made when presenting the report to external bodies.

In parallel to this statement S. Galès has asked the ESF Board to express its view on the report and the recommendations. The Physical Sciences and Engineering Committee (PESC) will express its opinion in a forth-coming meeting.

- A protocol of agreement, based on the Memorandum Of Understanding we have signed with ECT* (letter of May 23, 1998), has been signed by NuPECC and the Istituto Trentino di Cultura (ITC) at the last meeting of the ECT* Board of Directors on June 20, 1998. At that meeting, the Board approved the nomination of R. Malfliet as the Director of ECT* for three years starting October 1st, 1998. A protocol has been set up with ITC to transfer additional funding from NuPECC member countries to ECT* as well as a financing review committee to control the operation.

R. Malfliet will give a more detailed report at the next NuPECC meeting.

- A meeting with the representatives of European Funding Agencies has been held on March 28, 1998, near Paris. The minutes of that meeting have been distributed. Twelve European countries were represented by 17 persons; Austria, Poland and Switzerland were absent. The NuPECC delegation consisted of 6 members. Also present were representatives from ESF and The European Commission.

The important conclusions are summarised in the minutes.

In this positive and useful meeting, the presentation of the Report and of the collaborations at small and Large Scale Facilities have shown clearly the frontiers of the science and the intense and fruitful existing collaborations. RIB next generation facilities are understood as one of the burning issues and the Funding Agencies are willing to enter into discussion when specific proposals will be ready. Attention should be paid to synergy with other fields (nuclear waste disposal, spallation source, inertial confinement fusion). A corresponding letter has been sent to the chair of the RIB Study Group.

The discussions on the future of e-m physics are not very fruitful for the time being and the overall European situation is not ripe for a useful discussion with the funding agencies on this subject, whereas CEBAF is embarking into a two stage project of upgrading to 12 GeV by 2005 and 24 GeV by 2012. A recent detailed visit to CEBAF by S. Galès indicated that a proposal will be submitted to DOE for the next long range plan in the U.S. and calls for international (European) collaboration will be made. In the mean time the JHF proposal is progressing and will eat up any space left in the high-energy hadron sector.

At the meeting S. Galès has asked ESF to express its point of view on the report and its recommendations.

- The OECD Megascience Forum Working Group on Nuclear Physics met in Washington on May 14 and 15, 1998. The field has been covered by 5 sub-groups and after the meeting it was concluded that the important findings are the following:

- Scientific priorities are well established at the regional level in Europe, the U.S. and Japan.
- The proposed facilities are consistent with national priorities.
- A strong scientific consensus about scientific priorities has been found.
- Nuclear physics is becoming increasingly dependent on large facilities
- The next generation of facilities is either at regional or at world scale.

In the following 5 one-page conclusions for each group it is stated that

Planned regional centres for RIB in Europe, Japan and the U.S. are strongly supported

Activities on relativistic heavy ions are concentrated presently at SPS, in a few years at RHIC and later at LHC; the scientific community wishes to continue the long tradition of international collaborations, and obstacles from US agency on the participation to ALICE should be removed

The multi-purpose hadron facility JHF proposed at KEK (700 M\$ high intensity proton accelerator of 50 GeV) should get supported for exploring international collaborations at this world-wide unique facility.

A clear need for a world class electron facility is stated; the CEBAF upgrade proposal presented. Starting discussion on international collaborations is recommended.

Medical applications such as cancer therapy with particles beams and active techniques (coupling between imaging and particle beams at GSI) are discussed; the potential for nuclear waste transmutation of accelerator driven systems has been recognised; consensus has emerged on research issues such as the spallation process, target technology, accelerator design and fundamental nuclear physics questions.

The final report will be discussed at the next meeting of the OECD Megascience Forum in Paris on November 9 and 10, 1998.

- A meeting of the Concerted Action FINA was held on June 29 and 30, 1998, at Jyväskylä. A copy of the minutes of this meeting is enclosed with these minutes. During the meeting were presented and discussed:

- the EU mid-term audit of the user access contracts and the perspectives of the Fifth framework
- statistical data of the TMR-LSF activities; copies are enclosed
- the increase of the budget for Infrastructure Co-operation Networks (successor to Concerted Actions in the Fifth Framework), the possibility of having several ICN in one sub-field, including ECT*
- access to LSF activities of the various members
- the NuPECC Report and its recommendations
- RTD activities in nuclear physics

The lack of participation from the electromagnetic community led to the discussion to free their part of the budget (15 kEURO). There is a demand from the PANS activities to use this money; this will be discussed under point 5 of the agenda.

3. Nuclear Physics News International

The present contract with Gordon & Breach is running until the end of 1998, and will be extended without changes for another two years.

There is still no financial support from EPS/NPB.

The „special issue“ in connection with INPC'98, NPN 8.2, has been published and distributed; NPN 8.3 is being printed; NPN 8.4 is planned to be a „special issue Japan“.

The next meeting of the Editorial Board will be held in connection with INPC'98 on August 29, 1998, in Paris.

4. NuPECC Handbook

All entries have been received except for CERN; these will hopefully follow beginning of September. Publication is envisaged by the end of 1998; the funds for that are available within the budget of the Concerted Action FINA.

5. Public Understanding of Nuclear Physics and Relation with EPS/NPB

A workshop „PANS“ (Public Awareness of Nuclear Science), sponsored by NuPECC, was held on April 24 and 25, 1998, in Louvain-la-Neuve. The notes of this workshop and a list of participants are included.

The next workshop will be held in Orsay on November 27/28, 1998, where the progress of the three envisaged projects - website, popular book, travelling exhibition - will be discussed as well as the

proposal to the EU within the Fifth Framework. For financing of the workshop, the PANS Study Group asks to receive part of the money freed within the Concerted Action FINA; S. Galès will write a letter to J. Vervier, the Co-ordinator of FINA, and ask him to allocated 10 kEURO for this activity.

A meeting of the Study Group to discuss further details of the workshop was held on August 21, 1998, in Groningen; a copy of the notes on this meeting is enclosed.

6. Resources in Nuclear Physics

Tables with preliminary numbers have been sent to all NuPECC members on May 18, 1998; they have been asked to introduce final improvements if necessary. This has been done, so the numbers now existing in the NuPECC Database are considered to be the final numbers approved by the NuPECC members for their countries. Copies of graphs as invented by S. Galès and shown by A. Shotter are included. It is agreed upon that equivalent tables as those represented in the ECFA Report should be produced. No consensus is reached on the publication of a graph shown by S. Galès, representing the expenditure divided by the civil research budget and the GNP per country.

A. Shotter will prepare an introductory chapter, explaining in detail how the tables were achieved; the text will be distributed before and discussed at the next NuPECC meeting.

7. NuPECC Study Group on Radioactive Beam Facilities

A copy of the notes on the last meeting of the Study Group, held on May 25 and 26, 1998, in Garching, is enclosed. A draft of the different chapters of the report (see „Outline of Report“ on the NuPECC webpage) will be written by the end of December 1998. Since R. Siemssen, the chairman of the Study Group, will move to Argonne National Laboratory in October for a period of one to two years, it was felt that a new chairman who is closer to the activities in Europe should be appointed by NuPECC in close connection with the members of the Study Group. S. Galès is given a mandate to make a decision within two weeks.

8. NuPECC Study Group on Large Scale Computing

After the last meeting of the Study Group in March 1998, a new version of the report with a more profound introduction to the fields and a deepened scientific part was distributed by e-mail just before the meeting. Due to the short time interval, a detailed discussion will be held at the next NuPECC meeting in order to enable the NuPECC members to study the report in detail.

It is noted that - triggered by NuPECC - ECFA has set up a similar working group.

9. New Initiatives

- Search Committee for new chairman

The term of the present chairman S. Galès will end on December 31, 1998. A search committee is set up to discuss with the NuPECC members, form an opinion and come up with a report proposing 2-3 candidates for the election of the new chairman that will then take place at the next NuPECC meeting. The members of the Search Committee are D. Guerreau, M. Harakeh, G. Ricco and H.J. Specht.

- Re-use of LEP cavities

S. Galès has been informed that CERN is looking very seriously into the re-use of the LEP cavities. The Director of the CERN Accelerator Division, K. Hübner, has looked into the possible use for a recirculating 20 GeV linac and found it feasible with a dramatic decrease of the cost of such a facility as compared to the original estimate for a facility built from scratch. Before writing an official letter to the CERN management, S. Galès is asked to contact K. Hübner and to discuss the content of this issue. If the outcome looks promising, he will write a letter to the CERN Management asking for a CERN - NuPECC Study Group similar to the one set up for the ELFE@DESY case.

- Concerted Action

J. Vervier sent a letter to S. Galès, containing a „Memorandum to NuPECC on the Fifth Framework Programme of the European Union“. A copy of the memorandum is enclosed. S. Galès is asked to write a letter to J. Vervier and answer the „Questions to NuPECC“ along the following lines: NuPECC is pleased to see that 10 nuclear physics facilities are supported under the LSF programme, but notes that no electron facility is supported. S. Galès will contact members of the community and point out the possibilities involved to them. The RTD programme on radioactive beam facilities should be pursued; possible additions could include studies on superconducting cavities for electrons and electron colliders. A new proposal for Infrastructure Co-operation Networks (ICN) could include ECT*, PANS, and computational nuclear physics.

10. Miscellaneous

- Letter from Uppsala

In response to the letter by J. Blomgren and L. Nilsson from June 3, 1998, that has been distributed previously, S. Galès is asked to write a letter to Uppsala, stating that at the time of the preparation of the NuPECC Report it was felt that the heavy ion programme CHIC was not yet ripe to be included, but that acknowledging the progress, the CHICSi group should be invited to write a contribution for Nuclear Physics News.

- Number of conferences and workshops

The ever increasing number of conferences and workshops is a problem for the scientific community; it is discussed at EPS where a system of approved and sponsored conferences exists. A. van der Woude is asked to write an editorial for Nuclear Physics News addressing this problem.

- AUSTRON

The study group headed by H. Rauch introduced a change in the machine design, going now to 500 kW and 10Hz, thus achieving half the peak flux of the ESS proposal. The report of the study group will be discussed at the assembly of ministers next month.

10. Next Meeting

The next meeting will take place on November 6 and 7, 1998, at GANIL.

München, September 21, 1998



