

Minutes
of the Ninety-Eighth Meeting of the
Nuclear Physics European Collaboration Committee (NuPECC)
held in Jyväskylä and online on October 15 and 16, 2020

Participants: Paul **Greenlees** (at JYFL)

Remotely: Eduardo **Alves**, Faıçal **Azaiez** (iThemba), Angela **Bracco**, Sandrine **Courtin**, Jens Jørgen **Gaardhøje**, Andreas **Görgen**, Joaquin **Gomez Camacho**, Sotirios **Harissopulos**, Rolf-Dietmar **Herzberg**, Tord **Johansson**, Jorgen **D'Hondt** (ECFA), David **Ireland**, Nasser **Kalantar – Nayestanaki**, Rituparna **Kanungo** (CINP), Gabriele - Elisabeth **Körner** (Scientific Secretary), Bernd **Krusche**, Yvonne **Leifels**, Marek **Lewitowicz** (Chair) (SPIRAL2), Weiping **Liu** (ANPhA), Adam **Maj**, Ulf-G. **Meißner**, Teresa **Montaruli** (APPEC), Gerda **Neyens**, Eugenio **Nappi**, Lucia **Popescu** (MYRRHA), Danas **Ridikas** (IAEA), Franck **Sabatié**, Hiroyoshi **Sakurai** (RIKEN), Boris **Sharkov** (JINR), Hans **Ströher**, Itzhak **Tserruya** (Israel), Calin **Ur** (EPS/NPB), Ioan **Ursu**, Martin **Venhart**, Vladimír **Wagner**, Nicolas **Walter** (ESF), Jochen **Wambach** (ECT*) and György **Wolf**

Remote Guests: Navin **Alahari**, Diego **Bettoni**, Witold **Nazarewicz**, Michel **Spiró**, Peter **Thirolf** and Hans **Wilschut**.

Indico: <https://indico.ph.tum.de/event/4506/> (nupecc_jyv)

Agenda

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17. News from Nishina Centre (Hiroyoshi Sakurai)
18. Report from the WG on Diversity (Nasser Kalantar)
19. Report from the WG on Recognition (Nasser Kalantar for Eberhard Widmann)
20. Special Report "Nuclear Physics in Everyday Life" (Marek Lewitowicz)
21. News from ESF (Nicolas Walter)
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24. NPN (Angela Bracco)
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1. Approval of the Agenda

The accepted agenda is given on page 2. Eberhard Widmann could not attend the meeting, therefore the election of the new NuPECC Chair is postponed to a dedicated short meeting on November 4, 2020.

2. Apologies for Absence

Paolo **Giubellino** (FAIR), David **Hertzog** (NSAC), Raimond **Snellings** and Eberhard **Widmann** (Deputy Chair) could not attend.

3. Minutes of the Previous Meeting

The minutes of the ninety-seventh meeting held in Valencia on March 6 and 7, 2020, are agreed upon with the following change: Adam Maj participated remotely. They will then be put on the NuPECC Website.

4. COVID-19 pandemic consequences in the European labs

All participants report on the various measures in their countries / labs; those were quite similar in all places. After the NuPECC Meeting in March, nearly all countries went into a more or less strict lockdown, thus working became only possible in home office for several weeks; after the easing of some restrictions in May, people could eventually go back to their offices, obeying rules such as wearing masks and keeping distance. Due to the imposed travel restrictions, experiments at those accelerators that provided beamtime e.g. GSI, JYFL, ... could only be performed by local users; experiments with equipment provided from outside had to be postponed. Information on all measures was collected from the NuPECC Members and is provided on the NuPECC Website: <http://www.nupecc.org/?display=anticovid19>. Lectures and seminars are held online (Zoom, Teams, YouTube,...); some information on regular seminars is also collected and available on a new webpage under <http://www.nupecc.org/?display=webinars>. All NuPECC Members are encouraged to provide updated information on the websites mentioned above.

5. News from Canada

Rituparna Kanungo reports on the nuclear physics activities in Canada; her presentation can be found on the NuPECC Indico site.

6. News from MYRRHA

Lucia Popescu reports on the status of MYRRHA; her presentation can be found on the NuPECC Indico site.

7. News from iThemba

Faiçal Azaiez reports on the progress of iThemba; his presentation can be found on the NuPECC Indico site.

8. News from GANIL-SPIRAL2

Navin Alahari reports on the progress of SPIRAL2; his presentation can be found on the NuPECC Indico site.

9. Chair's Business

Marek Lewitowicz welcomes the new NuPECC Representative, Sandrine Courtin representing France/CNRS, replacing Navin Alahari, and the representative of the new Associate Member Israel, Itzhak Tserruya.

NuPECC observes a minute of silence commemorating Claude Détraz, the first Chair of NuPECC, who passed away in June 2020.

Marek Lewitowicz reports on his activities for NuPECC; his presentation can be found on the NuPECC Indico site. The main items addressed were:

- NuPECC Task Force meetings

The last one was held in Madrid with representatives from the Spanish government and funding agencies; agenda, participants, and all presentations can be found in the Members' Area of the NuPECC Website. The discussion was very positive; Spanish funding agencies and Spanish nuclear physics community following recommendations formulated in the NuPECC 2017 LRP. The Spanish ministry of research requested a significant increase of the budget of research in the coming years – subject of approval by the Spanish parliament. Marek Lewitowicz mentioned the missing financial contribution of Spain to ECT*.

The planned Task Force Meeting in Finland is postponed to a date when a personal meeting will be possible.

- Review of NuPECC

The panel for the periodic review was established by ESF after consultation with the NuPECC Management: Michel Spiro (Chair), Witold Nazarewicz, Peter Thirolf and Hans Wilschut; the Terms of Reference for the panel are available in the Members' Area of the NuPECC Website. The requested self-evaluation report was submitted to ESF and also put in the Members' Area of the NuPECC Website on July 20, 2020. The interviews with Angela Bracco, Marek Lewitowicz, Eberhard Widmann and Gabriele-Elisabeth Körner that were planned to be held at the NuPECC Meeting in Jyväskylä on June 5 and 6, 2020, were postponed; the members of the panel participate in this online NuPECC Meeting and the interviews will be held in a separate online session on November 30, 2020. A set of questions elaborated by the panel was sent to NuPECC by ESF on October 12 and will be discussed internally before the interviews. The panel's report should be available by the end of 2020 and will be presented and discussed at the NuPECC Meeting in March 2021.

- Joint ECFA-APPEC-NuPECC actions

are discussed under points 13, 14, 15, 18 and 19 of the agenda. A dedicated website has been established – see <http://www.nupecc.org/jenaa/> - where all activities are covered for the three committees.

- Support actions and lobbying

The programme for Horizon Europe is still under discussion; all NuPECC Members are urged to lobby for a nuclear physics topic in the dedicated calls with their National Contact Points to be submitted to the Programme Committee.

All NuPECC Members are urged to provide information for the various topical pages of the NuPECC Website.

Support for conferences should continue in 2021 – see also point 25 of the agenda.

10. News from FAIR/GSI

Yvonne Leifels reports on the progress of FAIR/GSI; her presentation can be found on the NuPECC Indico site. A new drone video of the FAIR construction site is available and will be put on the NuPECC Website.

11. News from JINR

Boris Sharkov reports on the activities at JINR; his presentation can be found on the NuPECC Indico site.

12. News from ELI-NP

Calin Ur reports on the activities at ELI-NP; his presentation can be found on the NuPECC Indico site.

13. Update of ESPP and News from ECFA

Jorgen d'Hondt reports on the Update of the European Strategy in Particle Physics ESPPU and the activities of ECFA; his presentation can be found on the NuPECC Indico site. His term as Chair of ECFA ends by the end of this year; Marek Lewitowicz thanks him on behalf of NuPECC for his outstanding contribution to the joint activities of ECFA with NuPECC and APPEC.

14. News from APPEC

Teresa Montaruli reports on the activities of APPEC; her presentation can be found on the NuPECC Indico site. Her term as Chair of APPEC ends by the end of this year; Marek Lewitowicz thanks her on behalf of NuPECC for her fruitful collaboration in the joint activities of ECFA with NuPECC and APPEC.

15. JENAA Eols

NuPECC hosts the master website of all joint ECFA-NuPECC-APPEC activities for all three committees: <http://www.nupecc.org/jenaa/>

All the Eols

1. Dark Matter - iDMEu (<https://indico.cern.ch/event/869195/overview>)
2. Gravitational Waves for fundamental physics (<https://agenda.infn.it/event/22947/overview>)
3. Machine-Learning Optimized Design of Experiments - MODE (<https://userswww.pd.infn.it/~dorigo/MODE.html>)
4. Nuclear Physics at the LHC (<https://indico.ph.tum.de/event/4492/>)
5. Storage Rings for the Search of Charged-Particle Electric Dipole Moments (EDM) (<https://indico.ph.tum.de/event/4482/overview>)

had their kick-off meetings together with their respective members of the Task Force; interested additional NuPECC Members are encouraged to join and strengthen the Task Force. The proponents are encouraged to submit their applications for financial support to the three committees by November 23, 2020.

16. EIC Europe

Franck Sabatié reports on the NuPECC Task Force for EIC; his presentation can be found on the NuPECC Indico site.

17. News from Nishina Centre

Hiroyoshi Sakurai reports on the activities of the RIKEN Nishina Center for Accelerator-Based Science; his presentation can be found on the NuPECC Indico site.

18. News from the WG on Diversity

Nasser Kalantar-Nayestanaki reports on the Working Group on Diversity; his presentation can be found on the NuPECC Indico site. The Diversity Charter has been agreed by ECFA, NuPECC and APPEC and can be found on the JENAA Website under

http://www.nupecc.org/jenaa/docs/Diversity_Charter_of_APPEC_ECFA_Nupecc_-8.pdf. Dedicated surveys – see <http://www.nupecc.org/jenaa/?display=diversity> bottom – were prepared and should be sent to collaborations, organisations and conference organisers after being checked by the CERN Legal Office. ECFA (Patricia Conde Muíño) agreed to take care of a first round of analysis.

19. News from the WG on Recognition

Nasser Kalantar-Nayestanaki (for Eberhard Widmann) reports on the Working Group on Recognition; based on the findings of ECFA - see <http://www.nupecc.org/jenaa/docs/ECFA-Survey-Recognition-Results.pdf> - questions were sent to the major collaborations in nuclear physics ACTAR-TPC, AGATHA, ALICE, BM@N, CBM, CLAS, CRIS, Mass measurement program at GSI/FAIR, Galileo, HADES, HISPEC/DESPEC, IDS, Isolde, JEDI, LUMEN, MATS/Laspec, Miniball, MPD, nTOF, NUSTAR, PANDA and R3B. Several answers were received and discussed in a first online feedback meeting on October 7, 2020; the discussion on best practice is continuing.

20. Special Report “Nuclear Physics in Everyday Life”

The Working Group – members are Marek Lewitowicz (**ML**), Joaquin Gomez Camacho (**JGC**), Sotiris Harissopulos (**SH**), Danas Ridikas (**DR**), François de Oliveira (**FdO**) and Vladimir Wagner (**VW**) – is working on the following chapters (initials of the corresponding convener in bold):

1. Introduction (scope of the report, what is nuclear physics, nuclear data, ...) - **ML**
2. Radioactivity (natural radioactivity, cosmic rays, induced radioactivity) - **ML**
3. Origin of elements in the Universe – **FdO**
4. Climate & Environment (Sun activity, heat in the Earth interior, ocean monitoring, wastewater treatment, mapping of groundwater resources, ...) - **JGC**
5. Energy (electric power generation) – **VW**
6. Health (radioisotopes for therapy and diagnosis, hadrontherapy) - **SH**
7. Everyday life products (sterilization, radiation processing, cross-linked coatings, material modification, food and agriculture, ...) - **DR**
8. Space technology & exploration – **ML**
9. (Cultural) heritage and Forensics – **DR**

Several online meetings have been held to discuss the contents and form; a full draft should be available by November 20, 2020. The report should then be edited by Nina Hall, the science writers who had prepared the brochures of the NuPECC Report on medicine and the NuPECC Long Range Plan.

21. News from ESF

Nicolas Walter reports on the activities of ESF; his presentation can be found on the NuPECC Indico site. NuPECC offers help on the new project CatRIS (Catalogue of Research Infrastructure Services); the present information available should be checked and all entries from the NuPECC Handbook should be added.

22. News from ECT*

Jochen Wambach reports on the activities of ECT*; his presentation can be found on the NuPECC Indico site. In order to find a solution for the threatening budget cuts to be applied by the Bruno Kessler Foundation and its plans to introduce additional topics such as Quantum Technology, Gert Aart (Chair of the ECT* Scientific Board), Jean-Paul Blaizot (Past ECT* Director), Marek Lewitowicz, Martin Savage (ECT* Scientific Board member) and Jochen Wambach (ECT* Director) formed a task force in addition to the one established by FBK. Several meetings have taken place; the discussion is ongoing. All NuPECC Members are urged to stress the importance of ECT* and its support when interacting with their funding agencies.

23. PANS

Rolf-Dietmar Herzberg reports on the progress of the PANS activities towards NuPRO – a repository of Nuclear Physics Resources for Outreach; his presentation can be found on the NuPECC Indico site. Martin Venhart volunteered and was approved as a second NuPECC Member in PANS (<http://www.nupecc.org/pans/?display=about>).

24. NPN

Vol. 30 No. 3, the “Special Issue” on nuclear physics facilities – existing and planned – in Asia-Pacific, has been published and very well received. The next meeting of the Editorial Board will be held online on October 17, 2020, in Valencia, right after the NuPECC Meeting; all NuPECC Members are encouraged to propose possible contributions, in particular for the field of hadron physics.

25. Budget

Paul Greenlees presents the NuPECC Budget proposal for 2020; his presentation can be found on the NuPECC Indico site. Major items are the new special report “Nuclear Physics in Everyday Life” and a contribution to the “International Year of Basic Sciences for Sustainable Development 2022”; support for conferences agreed for 2020 will also be granted if the conference is held in 2021. For online conferences support will be decided individually based on the potential use of the money.

26. Place, Time and Topics of Next Meetings

The next meetings of NuPECC will be held on

November 4, 2020 (online, Chair Election)
March 4-5, 2021, in Liverpool (online)
June 2021, in Venice (?)

It is agreed that the format of the next online meeting in March 2021 should be the same as for the present meeting.

In 2022 a NuPECC Meeting in Cape Town could be envisaged in connection with the International Nuclear Physics Conference to be held there.

Proposed topics for next meetings

- High-performance computing (HPC), big data handling and sharing in Nuclear Physics
 Invitation for a presentation from Giovanni Lamanna, the coordinator of the H2020 ESCAPE project
- EDM Eol and projects in Jülich
- Quantum computing in nuclear physics
- Horizon Europe and research infrastructures (presentation from EC)
- Presentation from ANPhA

27. AoB

Nasser Kalantar conveys the sad message that KVI ceased to exist on September 1, 2020; the cyclotron was moved to the University Hospital for research on patient treatment, the people moved to the faculty of science and engineering.

München, November 12, 2020



(Gabriele - Elisabeth Körner)