

Meeting of the IUPAP Executive Council and Commission Chairs and Associated Meetings

DAY 3

Tuesday, 19th October 2020, 12am
Meeting organised in remote by ZOOM

In attendance:

1. Michel Spiro, President
2. Silvina Ponce Dawson, President designate (acting)
3. Rudzani Nematudi, Associate Secretary General
4. Kwek Leong Chuan, Deputy Secretary General
5. Monica Pepe-Altarelli, Vice-President at Large (Centenary)
6. Gillian Butcher, Vice-President at Large (Gender Champion)(Acting)
7. Nithaya Chetty, Vice-President at Large (New Members)
8. Vitaly Kveder, Vice-President at Large (Outreach)
9. Rahul Pandit, Vice-President from Commission Chairs
10. Rolf Haug, Vice-President from Commission Chairs
11. Laura Greene, Vice-President from Commission Chairs
12. Claes Fahlander, Vice-President from Commission Chairs
13. Roberto Nardi, Vice-President from Commission Chairs
14. Peter Mohr (C2)
15. Sunil Gupta (C4)
16. Rolf Haug (C8)
17. Burkard Hillebrands (C9)
18. Heidi Shellman (C11)
19. Claes Fahlander (C12)
20. Sekazi K. Mtingwa (C13)
21. Roberto Rivarola (C15)
22. Minh Quang Tran (C16)
23. Tsuneyuki (John) Ozaki (C17)
24. Bruno Nachtergaele (C18)
25. Gerard Gilmore (C19)
26. David P. Landau (C20)
27. Roberta Ramponi (AC1)
28. Nils Andersson (AC2)
29. Mark Hamilton (AC3)
30. John Damilakis (AC4)

Observers:

31. Lucilla de Arcangelis, C3 Secretary
32. Jens Vigen, WG2 Chair
33. Jun'ichi Yokoyama, AAPPS Representative
34. Ahmadou Wague, AfPS Representative

35. Yunkyu BANG, APCTP Representative
36. Luc Bergé, EPS Representative
37. Stuart Palmer, EPS Representative
38. Duarte João da Costa Graça, IAPS Representative
39. Dominic Hurley, IOP Representative
40. Anne Thieme, ISC Representative

IUPAP Secretariat:

- Sun Han, Assistant Director, World Scientific Publishing Company
- Maitri Bobba, Senior Assistant Manager, NTU Institute of Science & Technology for Humanity (NISTH)

16. Review of the previous day.

The President recapitulates main issues of the previous day, starting by the Working Group on Physics and Industries. Linking IUPAP with companies is a priority, and IUPAP needs to explore all avenues to achieve this goal:

- To look at the IUPAC model
- To use Commissions and working groups to understand and exploit their links with companies
- To use the links between IUPAP conferences and companies
- To call for companies willing to sponsor Young Scientific Prizes
- To define a status of IUPAP Associate/Corporate member for companies.

Regarding the state of the art of membership, Nithaya reported the excellent progress of the past twelve months and of the past ten years, despite Covid-19. What is now needed:

- More involvement of members (strategic plan, joint activities, listen to their wishes
- To explore the possibilities to extend the membership (with different categories) to:
 - Companies
 - Regional Physics Societies
 - Individuals
- To better connect to young physicists.

The President then recalls all projects discussed in Day 2 (Gender Gap, LAAAMP, IYBSSD, etc.) and stresses the need to continue to establish multi-Union agreements on project basis and bilateral MoUs (IUPAC model).

Regarding conferences, main activity of the Union, he reminds all Commissions to send the reports. Rudzani, who reported in the previous day, is going to prepare the final list of approved conference and the related budget. The President repeats the invitation to encourage gender balance and diversity in the conferences, and to work for a worldwide access to conferences.

Nithaya adds a comment on an issue discussed in the Day 2. Laura Green had expressed the opinion that nowadays the majority of physicists work outside the academia, in the private sector. If this is the case, Nithaya points out, it will become necessary to revise not only IUPAP activities but also the academic curricula - IUPAP should reflect upon and face this change. Sunil gives a suggestion on the question of sponsorship. It is probably more fruitful to contact small companies, which would be more interested to make their brand known through the sponsorship of the awards than the big ones, which are already well known at an international level.

17. Commissions matter

17.1 Designated Chairs

The President asks if there is any question on the Commissions' reports that were available online, but there is none.

Silvina shares on the screen the list of current Chairs and nominations for Commissions asking the participants to verify that the list is correct. There is a correction regarding the spelling of a name. Nithaya asks how Chairs are elected (inside the Commissions, with which criteria), when it is not the vice-Chairs who takes the role. The President explains that the proposals are done by the Commissions (and at the bottom of the list there are the motivations of the various candidatures), but at the end is a special commission of the Executive Council that accepts the nominations. This commission assesses in particular if there is a good balance in terms of regions and gender considering the totality of IUPAP members. It was asked how many women are Chairs of Commissions. At the moment it is impossible to answer the question, but as to-do list it is decided to add the gender in the list to present to the GA.

The nominations are approved.

17.2 and 17.3 Changes in members and mandate

There is a short discussion on some name change in the Commission members, in the Commission titles and/or mandate. All these changes need to be approved by the GA

17.4 Proposals for new Commissions

Silvina then relates on the existing proposals for new Commissions.

There is the proposal to establish a Fluid Physics Commission. A discussion on the matter follows. It was mentioned that there was a Working Group on Soft Matter Physics, so the two areas could be put together, but nobody of the presents was involved in it. Others underlines that there are overlaps with other existing Commissions, e.g. condensed matter from the one side and biological physics from the other. The more traditional meaning of fluid physics (turbulences etc.) are considered in the Commission on Plasma Physics. But it is true that there is a growing of publications in the field of soft matter and computational fluid dynamics, so that it might be right to consider the proposal. It is suggested to look at the existing conferences, if there are important conferences in that field, a IUPAP Commission would make more sense. A comment is made that under C3 a conference on soft matter was supported. The possible relationships with **other Unions** is also to be explored, including how that Union might react to the creation of a Commission inside IUPAP.

A second suggestion is about a Commission on History of Physics, that would be up-to-date for IUPAP present moment, as in 2020 the Union is going to celebrate its centenary. There are precedent - other Unions have structures in common with the Union of History and Philosophy of Science, so IUPAP might establish an affiliated commission which is under both the Unions, or a more simple MoU. It is important to understand if there are physicists who would interested in this project, to work with historian colleagues; therefore all Commission Chairs are asked to check if they have members interested in the project. Participants are interested to go on exploring the project. Laura suggests also that IUPAP should also tackle issues regarding ethics, first of all because harassment is still a problem also in academia.

There is a third proposal for an affiliated Commission with the IAPS, International Association of Physics Students. Duarte João da Costa Graça, IAPS representative at the meeting and signer of the proposal, explains that this is an idea that was going on for years, but now with GA in 2021 it is time to make it happen. Main aim is to bridge a gap that many

times exist between the physics community and the students, so that students become active members of the community. Issues related to gender balance, marginalized groups, these are topics we want to tackle. The collaboration might help students to come to know new research fields, and we might have event together. We are 40 years old now, but activities are too much concentrated in Europe, so that IUPAP might help us also to reach more students and student association especially in Latin America, Africa, across Asia and Oceania. Silvina asks if it is true, in his experience, that most physicists work outside academia. Duarte answers that it varies in the different countries, but for example in Portugal, where he is from, many students come up to work in engineering physics, and the large majority in industries. He has not data, but he feels that it is true that the majority of physicists work in the private sector. IAPS has an alumni section, so that the association might help IUPAP to reach also people who work in industries and companies. Roberto Rivarola (Chair C15) agrees that it varies with countries, in Argentina, for example, the majority of students remain in academia or so they would like, and it is not easy to promote opportunities outside it. Roberto Nardi (Vice-President from Commission Chairs) comments about the Brazilian situation, pointing out that secondary school pupils do not choose physics, the profession of physics is not really considered. Teachers training, to become a physics teacher, is very different in the different countries; he is working on a survey on how somebody become a physics teachers all around the world. The research will be ready for the end of 2020, some results are already available. First of all many pupils choose physics because they are good teachers, so that good teaching is fundamental. The President resumes that this collaboration is a win win collaboration, and he will recommend to the GA to approve IAPS as an Affiliated Commission so that in next GA participates as member.

17.5 Interdisciplinary Research Young Scientist Award

Silvina reports on the idea of a special prize given for interdisciplinary research that was discussed with Michel and Bruce. The prize could be awarded by the GA; i.e. every 3 years. As for the definition of disciplines or topics, she suggests to keep it open for the first edition, because it is difficult to foresee what kind of proposals might arrive. Candidatures can be gathered by all Commissions, which then redirect the proposals (with cv, motivation etc.) to the Commission closest for the topic. The Selection Committee could include members of the involved Commissions, but it could also ask an advise to referees expert in that particular field. Possibly the process could involve also other Unions, if relevant. All process should be online. We need to define how many years from PhD can we accept in the definition of “young”, if a degree in physics is a condition, and we need to ensure that gender balance and diversity are considered. Rolf Haug says that really support the project, but he asking how it is possible to define/measure “interdisciplinary”. The President suggests that candidates should have a degree in physics but whose research could not be awarded by any of the existing Commission. It is added that that prize would be very welcome, because it is more difficult for scientists working in interdisciplinary fields to be recognized. However, a sort of definition of interdisciplinary needs to be found. Silvina suggests that the definition could be requested for the letter of support of the candidature, i.e it is part of the motivation. Monica also finds the idea too vague – would physics and art be considered? She proposes to define the scope of the prize a little bit better. It is suggested that the impact in other fields could be a requirement that narrows the scope; for example somebody who revolutionize the Covid-19 modelling. I do not think we would award this kind of research in the statistical physics Commission. We might define a good candidate as a physicist who made an impact in another research field. Bruno recalls that initially the idea was to limit the prize to research areas that falls inbetween Commissions, no something so far as art&science. For example the requirement in that case would be that the applicant is supported by at least two

Commissions. Much more difficult to identify physicists who had an impact in another field. The President says that this is a very good proposal, simpler to start with the award for next GA: at least two Commission need to support an applicant.

18. 30th GA 2021 matters

The President relates that GA 2021 should be in Beijing, October 20th to 22nd, with the same condition that were agreed before the pandemics. It shares on the screen the letter that was sent to all IUPAP members regarding the postponement of the GA 2020 and reminds that that document was approved. Main points are:

1. Term of Office of Members of the Executive Council. Because of the postponement the offices of the Executive Committee and the members is extended for one year. If somebody wants to resign before, they need to write to the President.

2. Term of Office of Members of Commissions: Members of IUPAP Commissions serve from

the beginning of the year after a General Assembly until the close of the year of the next General Assembly. Their term is thus extended to 31st December 2021. Commission members who wish to resign from the Commission should do so in writing to the Chair of their Commission and the President. The EC will take steps to appoint their replacement.

3. Nominations timeline: In agreement with the By Laws, nominations for the next Executive Council and Commissions will be opened on or before 20th March 2021, and nominations made by IUPAP members should be received no later than 20th May 2021.

4. Working Group tenure: The duration of Working Groups and their composition varies from Group to Group, and is set out in detail in the appendix. Changes of members of Working Groups will continue to be determined by the working groups in consultation with the EC.

5. Report submissions for Commissions, Working Groups and Neutrino Panel: Reports from Commissions, Working Groups and the Neutrino Panel will of course go to the General Assembly in 2021, but the Council and Commission Chairs will be having a video/tele meeting in October 2020 and request that, in addition to the reports to the General Assembly these bodies also report to that meeting of the Council and Commission Chairs. In October 2019 Commission Chairs notified the EC who the Commission would nominate to be their Chair for the 2021-2023 period. Commission Chairs should advise their nominees that their term as Commission Chair will now commence on 1st January 2022 and continue until the 31st December of the year of the 31st GA.

6. Commission Funds: In these unusual circumstances any funds available to a Commission or working Group in 2020 which remain unspent at 31st December 2020 may be carried forward to 2021. The budget allocations for all purposes for 2021 will be formulated by C1 as soon as possible, and will be recommended to the EC for their determination.

7. Membership Fees: Because some IUPAP members require advanced notice of the likely fees in the next triennium, the Commission on Policy and Finance is working to provide those estimates to the Executive Council before 30th June. It is planned to ask IUPAP members to confirm the 2021 fees in an email vote, in the same way that the postponement of the 30th GA was confirmed.

8. Year of 31st GA: The postponement of the 30th GA raises the question of the date of the 31st GA. Should there be a three year interval after the 30th GA, with the 31st in 2024, or should the 31st GA be held as originally planned, in Paris on the Centenary of the 1st GA in Paris in 1923?

Nithaya suggests to be prepared also for a virtual conference, because the future scenarios of pandemics are not clear at all. To face the pandemics we learnt very well how to organize online conferences, which can also reach more participants, especially in developing countries that can find expensive the travels. The President agrees, but warns that in order to do that the Statute and By Laws of the organization need to be changed, which is a priority.

19. 31st GA 2023 matters

Why to organize the 31st GA in 2023? There are many reasons presents Michel:

- In 2023 there is the 100th anniversary of the first General Assembly in 1923 in Paris
- It is close to the Centenary of IUPAP in 2022
- Both events could be connected to the International Year of Basic Sciences for Development in 2022/2023
- In that way we could go back to the normal cycle which should have been GA 2020, GA 2023 but due to the pandemic becomes GA 2021, GA 2023.

As for the location Paris should be the natural place, but Geneva is also attractive for the possible help of CERN and if the agreement with the UniGe would materialize. Or any place elsewhere.

Commission Chairs, and Commissions, are elected for 3 years: they would run then from 2021 to 2024. New Commission Chairs and Commissions entering in function end of 2024 would be elected at the GA 2023. After 2023 of course a question remains: next GA would be in 2026 or 2027?

Nithaya suggests to go and look how it was managed the Union during the Second World War, what kind of disruption occurs and how it was faced. The President agrees that it might be of inspiration.

20. Designation of Acting Officers and Executive Committee Members

The President informs that all designations will be ratified by the GA.

He starts with two members of the EC who were already appointed, but who now need to stay for one year more:

Silvina Ponce Dawson as Acting President Designate

Gillian Butcher as Acting Vice President at Large and Gender Champion.

Then he proposes to appoint a new Acting Vice President at Large for Outreach and Ethics, Laura Greene. The title is a little changed, to broaden the mandate to ethical issues.

He also proposes the idea to substitute the Vice President at Large for Financial matters, with a Treasurer, and inform that this change will also be included in a new Statute. For this responsibility he suggests Boris Sharkov, as Acting Designate Treasurer.

Finally he underlines the necessity to consolidate the transformation of IUPAP in an association under the Swiss law, and for this reason he suggests to appoint Jens Vigen as Acting Deputy Secretary General in charge, also to follow the possible movement of the Secretariat. Kwek remains Secretary General.

No objections from participants.

21. Procedures for nominations for GA

The President presents a proposal for procedures that was suggested by Bruce. The document is shared in the screen and commented.

A meeting of the Council with the Commission Chairs will be held before the formal Council meeting which precedes the 30th GA to manage the geographic and gender balance of the nominations for Commissions to be recommended to the GA as the slate.

He asks that this meeting confirms the following principles, which are a consequence of the fact IUPAP is an international Union representative of all physicists:

1. The Chair of the Commission to be elected at the GA should be identified at least 12 months before the election to allow them to become familiar with the obligations, duties and responsibilities of the Commission Chair, and with the work program of the Commission.
2. The importance of a balance in the geographical and gender diversity in the membership of the Executive Council, Commission Chairs and Commissions.
3. That to ensure that balance occurs across Commissions as a whole, it may be necessary for the President to make additional nominations on behalf of the Council after the formal closing of nominations.
4. That to ensure that balance occurs across Commissions as a whole it may also be necessary to negotiate changes to the initial choice of Commission members made by the Commissions. This may involve related variations in the choice of members made by several commissions, to be made in a meeting of Council with the Commission Chairs.

The President warns that future decisions in the GA might affect these procedures.

22. IYBSSD

The President relates. The proclamation by the UN General Assembly of an International Year of Basic Sciences for Sustainable Development in 2022, IYBSSD 2022, was unanimously recommended at the UNESCO General Conference in November 2019 and also by the World Science Forum in November 2019.

More information on the website: <https://www.iybssd2022.org/> Everybody is invited to visit the website and give suggestions.

To the event there is the commitment of about 30 Unions and Organizations (with MoUs that oblige to financial support), the support of about 40 Academies and of 25 Nobel laureates.

We did not succeed to table the resolution on the proclamation at the current remote UN GA (restricted agenda). We are still trying (with South Africa and Senegal now) to table it in the second committee of the UN (G77) which would be a great step towards the proclamation. Very likely, it will be proclaimed at the 2021 UN GA a bit late for IYBSSD 2022. We will be in a rush to prepare opening ceremony and events. Ideally for us, an approval will arrive before the end of 2021. Hopefully the IYBSSD will last then two whole years, 2022 and 2023.

End of Day 3.