

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

### DAY 4

21st October 2020, 12am  
Meeting organised in remote by ZOOM

#### **In attendance:**

1. Michel Spiro, President
2. Silvina Ponce Dawson, President designate (acting)
3. Rudzani Nemetudi, 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)

#### **24. Review of the previous day.**

The President recapitulates previous day work, starting from what concerns Commissions and Affiliated Commissions. Main issues are:

- This is the right time to review the title and mandate of Commissions. Chairs can send their proposals in view of the next GA.
- The list of designated Chairs still valid and was accepted
- Changes in C2: Isabel Godinho, member of C2 becomes Secretary (replacing Michael de Podesta) and Richard Brown becomes a new member: accepted
- There is a need to explore more the possibility that Fluid Dynamics becomes a commission or an affiliated commission
- It is necessary to work on a MoU with IUHPST on the history of Physics
- IAPS becomes an Acting Affiliated Commission until it becomes and Affiliated Commission at the next GA
- Interdisciplinary Young Scientific Prize: for the first edition nominations will be collected from the community, they need to be supported by more than one Commission.

Regarding the GA 2021, the location is confirmed in Beijing, dates October 20<sup>th</sup> to 22<sup>nd</sup>, but we need to prepare a plan B in case the conference will be remote; a virtual conference need also changes in the Statute. The intention is to held the GA 2023 in Paris or Geneva. The CC designated at GA 2023 would enter in office end of 2024. In is necessary to change the nomination procedure accordingly: except for Commission Chairs, the rest is going like before.

The President recalls the designations of acting officers as approved the previous day. New appointments need to be approved by the GA.

#### **25. IUPAP Centenary**

Monica relates on the state of the art of the centenary celebrations. Unfortunately the progresses in the preparation were limited both by the pandemics but also by other IUPAP urgent matters, first of all the necessity to move the headquarters of the Union. These unforeseen issues changed priorities and possibilities for actions.

Main idea for the centenary is to split the work around four groups of initiatives:

- The Centennial Symposium
- Publicity material on the Centenary (&IUPAP)
- History of IUPAP
- Satellite events elsewhere in the world.

The Symposium should be held in Geneva, possibly at CERN, in the fall of 2022, as one of the initiatives for the International Year of Basic Sciences for Sustainable Development

(IYBSSD). The available resources are modest, so it seems important to have the help of large institution such as CERN. IUPAP is also seeking support from CERN on a project by project basis to complement the hosting arrangement. Monica underlines the opportunity to formalise this collaboration, regardless of what happens with the headquarters - at CERN IUPAP can establish an important synergy with IYBSSD but also exploit the launch of the Science Gateway, a new building designed by world-renowned architect Renzo Piano, to give more visibility to the Symposium. The Science Gateway is entirely funded through external donations. It will be dedicated to scientific education and outreach for the general public of all ages, with a 900-seater Auditorium. We hope to organize the opening of the new building together with the Symposium, with the present schedule at the end of 2022.

In preparation for the Symposium, she asks all Commission Chairs to identify a couple of outstanding scientists/communicators in their field, e.g. a senior and a more junior, to prepare a high-quality and diverse pool of speakers so to have a wide variety of options to choose from. The Symposium should reflect the diversity and geographical reach of the Union, as well as its history and strength. Proposals should be sent to Monica and in cc to the Secretariat.

Materials for the centenary, including a logo, are already available. The Commissions might add a page on their website and disseminate materials; they might use a downloadable template for their own initiatives.

Regarding the history of IUPAP we were contacted by Roberto Lalli, who works at the Max Planck Institute for the History of Sciences in Berlin and has a significant expertise in the history of physics institutions. He has offered to participate to the Symposium with a talk but also has proposed to organize a two-day academic seminar on the history of IUPAP which will end with a scientific publication. This event could be co-organised with Jaume Navarro who is the President of the Commission on the History of Physics of the International Union of History and Philosophy of Science and Technology, and in collaboration with the same Union, with which we are establishing a permanent collaboration as anticipated in day 3.

Some ideas for the workshop: the role of IUPAP in the development of physics, the connections between science and diplomacy, the internationalization of physics. Possible locations the Niels Bohr Institute in Copenhagen, or the Donostia International Physics Center in Donostia-San Sebastián. They ask for sponsorship (~30,000 euros) and need access to IUPAP archives. That remind us of the necessary to digitise the archives before we move the headquarters.

As the organization of satellite events, IUPAP members may think at the IUPAP-sponsored conferences as vehicles to celebrate the Centenary and the IYBSD, e.g. having dedicated plenary talks (for free). All 'Local' initiatives are encouraged. IUPAP will act as an 'umbrella' for these various initiatives, but things will not happen unless there is the participation of everybody. Finally we plan to organize the 2023 General Assembly, in Paris, 100 year after the first General Assembly (1923 - Paris).

The discussion follows. David P. Landau (Chair C20) underlines the necessity to reach and engage the entire physics community to promote the participation to the centenary of as many countries as possible. He also remarks the necessity to use more contemporary communication tools than leaflets and posters – to engage young scientists it is necessary to use social networks such as Twitter or Facebook. Monica answers that CERN might help also in that respect, having professional communicators who can disseminate information through all media. In order to reach all countries, IUPAP should try to design a strategy in order to promote activities at a local, regional level. **It is** suggested to involve Liaison Chairs – they represent the only direct link with all member countries. Sunil stresses that it is very important to push for the organization of events in Africa and Asia; Europe will surely be engaged, but there are regions where many members and scientists are that risk to be excluded;

also because, as it was already remarked, in the Commissions not all regions are equally represented.

## 26. AoB

### Website transfer

Silvina introduces. She received two quotes for the renew of the website. The first quote is from an Argentinian company, and it is approx. 6.000 \$; the site would be hosted in the cloud, so to be accessible from everywhere. The second, from India, is more convenient: same costs but for a double number of pages. But the most important problem, she underlines, is how we will then update the website. She thinks that all Commission Chairs should have their access to update directly their pages. Laura points out that a centralized coordination (Maitri or somebody external) is anyway necessary to remind Commission Chairs to send the needed information. Monica also underlines the two necessary aspects: from the one hand there is a need of a centralized coordination, which possibly takes care also of the central part of the website, but on the other hand Commissions need to take responsibility for the updating on their activities. Dominique suggests that Commissions are responsible for the information, but somebody else should upload. Sunil suggests to ask the Indian company to include in the price also the maintenance, that is a usual request. The President concludes that if the Indian offer is more advantageous we can proceed with it. He resumes that updating will be responsibility of the Commissions but the Secretariat needs to coordinate and help (or another external service to be identified).

### Certificates for long term services

Silvina introduces. The certificates for long term services are recognitions given to people who served the Union for at least 9 years, having responsibility in the organizations but not as Chairs, President or Vice- President. 4 candidatures were received. The award consists in a paper certificate only. The motivations and CVs are available in the Google Drive of the meeting. The candidates, and proposers, are:

SNo	Nominator	Nominee
1	Silvina Ponce Dawson	Jackie Beamon-Kiene
2	Robert Tribble	Willem van Oers
3	Tsuneyuki Ozaki	Terrance J. Kessler
4	Jose Adolfo de Azcarraga	Luis Viña

Jackie Beamon-Kiene acted as Secretary of the Working Group on Women in Physics since its creation in 2000. She retired but continues to work for the group.

Willem van Oers has been the Secretary of the WG9 for many years, starting well before 2012.

Terrance J. Kessler served as Secretary of the ICUIL (International Committee on Ultrahigh Intensity Lasers) since 2008. The WP9 proposes.

Luis Viña is a condensed matter professor who served as member of C8 for two mandates and he was Secretary of this commission.

It is proposed to change the title in Certificate for Distinguished Service Award, because it is not just a matter of time, but also of quality of work. Everybody accepts the proposal and the candidates.

### Position on worldwide access to platforms

Silvina introduces the issue, which was raised by Nithaya – there are countries that limit the access to Zoom and other software for the online exchanges and communication. This goes against one of IUPAP main believes and fundamentals of work, the free circulation of people and ideas even among countries and regions that are in conflict. Therefore a statement was prepared (available on the Google Drive and shown in the screen) in which we arise the issue and ask all organizers of conferences and workshops to investigate if there are restrictions that affect their attendees and to guarantee other means for these people to access. Nithaya adds that it is possible not appropriate to suggest available platforms, neither there is a universal solution, but this statement from IUPAP side is important to raise awareness on a problem that possibly many ignore, and to push all organisers to propose more than one access tool for their event.

Everybody accepts, and the President asks the Secretariat to add this statement on IUPAP website.

#### LAAAMP continuation as a working group

Sekazi K. Mtingwa (Chair C13) illustrates the proposal (available on the Google Drive). LAAAMP has been working for four years, for 3 years funded by ICS. Now we are in the process to guarantee more funds, meetings financiers and sponsors and it would be very important to enhance the visibility of LAAAMP, that at the moment appears as a project under C13. But if you think what light sources do, they are of interest for many other Commissions, from condensed matter to plasma physics. For that reason we ask to become a working group, and we do not ask for more support of any of the other group, what is important is the recognition and visibility that entails.

The President suggests to promote also a MoU among Unions, to support the project, beside becoming a working group. Everybody accept.

#### Celebrating the Quantum century

The President shares a document on the screen on this celebration. The year 2025 will mark 100 years since the development of quantum mechanics. A recent meeting included representatives from APS, DPG, IUPAP, the Max Planck Institutes, Sociedade Brasileira de Física, the Niels Bohr Archive in Copenhagen, the Cuban Physical Society, the Chinese Academy of Sciences, CERN, the Einstein Center at Hebrew University, ICTP Asia-Pacific, SISSA, and the Joint Institute for Nuclear Research in Russia. All these organizations aim at promoting an initiative **entitled “The Quantum Century”, to face** the problem of communicating quantum mechanics, a difficult and neglected topic, through a coordinated international action. The "Quantum Century" title is meant to reflect not only the potential of this celebration to highlight the theoretical, experimental, technological, and cultural impact of quantum mechanics over the past 100 years, but also the potential for the next 100 years of science and technology to be dominated by quantum-themed developments such as quantum computation and quantum materials. We might also include the history of quantum theory in the MoU with the Union of History and Philosophy of Science. Therefore the President ask the permission to adhere as IUPAP to this initiative and to add the topic to the mentioned MoU.

#### Call for nominations for WDS award

Jens Vigens (WG2 Chair) relates that IUPAP has been invited by the World Data System (WDS), which is an interdisciplinary body of the ISC (International Science Council), to nominate an early career scientist as candidate for the WDS Data Stewardship Award, before the end of October. The Prize is awarded every year since 2013. A list of awarded is available

online, and apparently many are physicists, so that IUPAP might really have many good candidates. Jens invites attendees to send him possible nominations.

### Updated list of conferences and budget approved

Rudzani shows the updated list on the screen. Variations regard Commissions 9, 15 and 20. For all other Commissions the table presented in Day 2 is unchanged.

For Commission 9, in agreement with the Chair, conference A and B are eliminated; they will be considered for 2022.

For C15 there is an A conference that we incorporated in the list 2021, because it is a biennial conference and will be held in remote.

For Commission 20 there is a conference that was considered new, but in fact it was postponed from 2020. And this also is an annual type of conference. We won't allocate a double contribute, but we will treat it as a postponed event.

With these updates we have a total of 36 conferences in 2021, 21 of which are new conferences and 15 postponed conferences from 2020. The total budget is 165.000 Euros, and this right amount should be substituted to the amount presented the first day that was not correct.

Kwek starts his presentation of the updated budget, prepared with Bruce McKellar, with a comment on the conference budget. We decided that the proposed budget of 130.000 Euros would lead to an uncomfortably large difference between the grant to the new conferences and the grants for 2020 conferences postponed to 2021, for that reason the conference budget for new 2021 conferences has been increased to 150.000 Euros. There is still a difference but it is not uncomfortable.

The discussions in this meeting will lead to new initiatives such as the affiliated status of the IAPS, the History of Physics Commission, a possible Commission on Fluids, etc. but the new initiatives line in the budget presented in Day 1 has an entry of 10.000 Euros from 2021 to 2023 which is committed to the IUPAP contribution to the IYBSSD. We have now increased this line in the budget from a constant 10.000 Euros to 15.000 Euros in 2021, 17.500 Euros in 2022 and 20.000 Euros in 2023.

He proposes that the budget as accepted for 2021 and the draft budgets approved for 2022 and 2023 be varied in this way and recommend that the Executive Council note that this variation will increase the budgeted deficit at the end of 2023 to 160.000 Euros, which is still in the range 100.000 – 200.000 Euros and is thus acceptable.

He recommend that the Executive Council Resolve that:

- The draft budget for 2021 in the file Draft budget 2021-2023 v3 0201017.pdf be approved as the budget for 2021
- The draft budgets for 2022 and 2023 in the file Draft budget 2021-2023 v3 0201017.pdf be accepted as the draft budgets for 2022 and 2023 respectively.

Because the decisions of this C&CC meeting may lead to changes from the draft budgets presented on Day 1, he suggests that in future October C&CC meetings, that the formal resolutions accepting the budgets for the next year and confirming the draft budgets for the subsequent years put be put until the final day to allow for introduction of necessary changes.

They apologise for not thinking far enough ahead to do it that way this year.

Everybody agree with the proposal changes and the new procedure for next meetings. The President thanks Kwek and Bruce for their work.

## **Conclusions**

The President then shares a power point presentation with the review of the work of the Day 4, to be used as main conclusions of the meeting.

### Centenary (Monica coordinates)

The Symposium should be held in Geneva at CERN and live-streamed. Commission Chairs should propose names of effective speakers.

We will establish synergies between history of IUPAP, of Physics, of Quantum theories. We need to digitalize the archives.

Everybody is invited also to organize satellite events, as part of existing conferences or as new events. In all member countries, but also non-member countries, especially developing countries.

### Website renewal (Silvina coordinates)

The company in charge of it could be an Indian company, which could also provide service for the maintenance. Commissions need to work on the updates related to their activities, but the Secretariat should coordinate.

### Headquarters move

Bruce and Kwek will follow the offer from Singapore and Asia, Michel and Jens the Geneva option, Silvina the Latin American and Nithaya the African proposals. Bruce and Michel will evaluate all options.

### AoB

- The Long Service Award is renamed Distinguished Service Award; the certificate will be sent by the Secretariat. The four proposed candidates will be rewarded.
- We accepted the statement on the accessibility of conferences, which will be published in the website.
- LAAAMP will be a working group for one year. An MoU will be prepared between all partners.
- The President invites everybody to send candidates for the WDS Award
- The final list of conferences and budget were approved.

The President thanks everyone for the attendance, participation and commitment. There were 42 attendees on average for all days of the C&CC (all Commissions and Affiliated Commissions, were represented along with observers).

He thank the C&CC members for having accepted to serve for one year more.

Maitri also thanks everybody and hope to meet them in the future. Everybody applauds Maitri and thanks her for her work. Everybody then exit the platform but the members of the Executive Council.

## **Executive Council**

The President shows a power point presentation with the summary of previous days work for final approval of the decisions. The slides report all issues but also the persons in charge of the various actions, when relevant.

Approved:

- The minutes of the previous C&CC meeting were approved
- The proposed budget for 2021 was adopted
- No objections to the indication for the forward planning of the 2022-2023 budget
- We will have to come back on budget issues at the end of the meeting in line with ‘new initiatives’ which we may decide upon

#### Matters arising:

- Put in place an interactive consultation process between Council and IUPAP Officers for position statements, acting more collectively to take into account the sensitivity of different people, cultures, regions...
- In the same spirit, produce a new version of the strategic plan considering all comments (Monica, Silvina and the President)
- Conduct joint activities on teaching physics in Asia/Africa/Latin America
- Come back on the budget at the end of the meeting
- Add the membership map to the “Members & Liaisons” website page Done
- Distribute the NTU – IUPAP MoU and the IUPAP – IUPAP Singapore Company MoUs (Added to the papers)
- Organise an at least one-year transition period in Singapore while looking for other locations for the IUPAP offices Kwek
- Call for proposals to host the headquarters and the accounts (not necessarily the same location). Fully explore the Geneva option as a reference (Jens). Explore others (India, South Korea...)

#### *Working Group on Industries* (President and Narayan):

1. Linking IUPAP with companies is a priority: physics is now more in industry than in academia
2. Explore all avenues to achieve this goal
  - look at IUPAC model
  - use commissions and working groups to know about their links with companies
  - use the links between IUPAP conferences and companies
  - call for companies willing to sponsor Young Scientific Prize (it would become an IUPAP/Company Prize)
  - define a status of Associate/Corporate member of IUPAP for companies.

#### Members Matters (President and Nithaya):

- Excellent progress in the past twelve months and in the past ten years
- More involvement of members (strategic plan, joint activities, listen to their wishes)
- Explore the possibilities to extend the membership (with different categories) to:
  - companies
  - Regional Physics Societies
  - individuals
- Better connect to Young Physicists
- All this would give a new impetus for IUPAP entering its second century

#### Unions, ISC, projects:

- Continue to establish multi union agreements on project basis
- Continue to establish bilateral MoUs (IUPAC model) (President)
- Strengthen links with ISC (President)



- Continue projects
  - SCGES (Silvina and Gillian and Rudzani)
  - LAAAMP (Sekazi)
  - IYBSSD (President)
  - Others (All)

#### Conferences:

- Come back at the end of C&CC on the list and budget of approved conferences (Rudzani)
- Reminder for reports on conferences, try to enforce (Secretariat and commissions)
- Check and encourage gender balance in conferences (amongst attendees, organizers, speakers) (Gillian)
- Worldwide access to conferences (visa, platforms, diversity balance) (Rudzani)  
Possibly that request should be reinforced, for example as a condition to receive other fundings.

#### Commission and Affiliated Commissions matter:

- This is the right time (IUPAP 100 years, to review the title and mandate of your commissions (please tell us in view of the next GA if you have suggestions) (Secretariat)
- List of designated Chairs still valid and accepted
- Changes in C2: Isabel Godinho, member of C2 becomes secretary (replacing Michael de Podesta) and Richard Brown becomes new member: accepted
- Explore more the possibility that Fluid Dynamics become a commission or an affiliated commission (is there a large conference attached to the subject?) or a working group (Silvina)
- Work on an MoU with IUHPST on the history of Physics (Silvina)
- IAPS becomes an acting affiliated commission until it becomes an affiliated commission at the next GA: work on membership (President and IAPS)
- Interdisciplinary Young Scientific Prize: Explore nominations from the community supported by more than one commission. Jury CC, award at the GA (Silvina)

#### Next General Assemblies:

- GA 2021 in Beijing, October , 20<sup>th</sup> to 22<sup>nd</sup>. Prepare a plan B in case it needs to be remote (change of the Statute)
- Go for GA 2023 in Paris or Geneva (centenary ceremonies and IYBSSD): CC designated at GA 2023 would enter in office end of 2024
- Change the nomination procedure accordingly: except for Commission Chairs, the rest is going like before.

#### Acting Officers:

- Silvina Ponce Dawson continues to act as President Designate
- Gillian Butcher continues to act as Vice President at Large and Gender Champion
- Laura Greene is recommended to be appointed by the EC as Acting Designate Vice President at Large Designate for Outreach and Ethics
- Boris Sharkov is recommended to be appointed by the EC as Acting Designate Treasurer
- Jens Vigen is recommended to be appointed by the EC as Acting Deputy Secretary General for one year in charge of the transfer of the IUPAP Headquarters in Geneva (President to inform)

Centenary:

- The Centennial Symposium (live streaming) in Geneva (Monica)
- Publicity material on the Centenary (&IUPAP) (Monica, Secretariat, All)
- We need a pool of communicators using the new communication tools (All)
- History of IUPAP Establish synergies between history of IUPAP, history of physics, quantum centenary (digitize the archives, Secretariat) (Silvina and Monica)
- Satellite events elsewhere in the world (IUPAP conferences?) (All)
- Involve member (Liaison officers?) and non-member countries (developing countries) (All)

IYBSSD:

- 2022 or 2022/2023
- Please help in getting the support of your country for the proclamation as soon as possible

Formal Call for host of IUPAP headquarters (Bruce):

- Website in the cloud → India Mumbai produce the new website and host it and provide for Central service? With the help of Commissions plus Secretariat responsible for the content (Silvina)
- HQ in Singapore and Asia options (Kwek and Bruce)
- HQ in Geneva option (President and Jens)
- HQ in Latin America option (Silvina)
- HQ in Africa option?
- Mix locations for bank account, office, website, IUPAP legal entity (Bruce and President)
- Goal: resolution at the next GA

Distinguished Service Award:

- It is proposed, that IUPAP award a certificate of gratitude and appreciation to those who have given long and meritorious service to the Union, but have not been a President of IUPAP or a Chair of a Commission or working group.
- Long service, is defined to be more than 9 years of service. Meritorious service is service recognized by the IUPAP Executive Council as having significantly helped IUPAP to achieve and sustain its mission.
- Send the certificate appropriately worded plus plaque? (Secretariat and Silvina)
- Laureates:  
     Jackie Beamon-Kiene  
     Willem van Oers  
     Terrance J. Kessler  
     Luis Viña

AoB :

- Virtual conferences and Worldwide Accessibility statement → website (Silvina, Laura and Secretariat)
- LAAAMP acting joint working group plus MoU inter partners (Sekazi and President)
- Call for nominations for WDS to Jens
- Support to Quantum Century OK and to history of quantum physics (President)
- Revised list of conferences and budget approved (next time we should have this point at the end of the meeting only) (Rudzani and Kwek)

The President then thanks all EC members for the participation and wish next EC&CC meetings will be in presence.