

On IUPAP Working Groups

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Silvina Ponce Dawson

University of Buenos Aires and CONICET, Argentina

President Designate, IUPAP





Working Groups

Working Groups are temporary structures.

From the Articles and Regulations:

- Unless otherwise specified by a resolution of the General Assembly, a Working Group shall be established for a period of 6 years. The General Assembly shall review the operations of the Working Group and decide whether or not the Working Group should be extended for a further period.
- The Executive Council will determine the membership of each Working Group.



List of Working Groups

- WG1: International Committee for Future Accelerators**
- WG2: Communication in Physics**
- WG5: Women in Physics**
- WG7: International Committee on Ultrahigh Intensity Lasers (ICUIL)**
- WG9: International Cooperation in Nuclear Physics**
- WG10: Astroparticle Physics International Committee**
- WG11: Gravitational Wave International Committee**
- WG12: Energy**
- WG13: Newtonian Constant of Gravitation**
- WG14: Accelerator Science**
- WG15: Soft Matter**
- WG16: Physics and Industry**
- WG17: IUPAP's Centenary**
- WG18: Ethics**
- WG19: Quantum Science and Technology**

Are all they active?

Working Groups

WGs that submitted a report to the EC&CC meeting of October 2020:

- WG1 (Intl Committee for Future Accelerators, since 1976; <https://icfa.hep.net/>)
- WG5 (WiP, since 1999; <http://wgwip.df.uba.ar/>)
- WG7 (Intl Committee on Ultra-High Intensity Lasers; <https://www.icuil.org/>)
- WG9 (Intl Coop on Nuclear Physics, since 2003; <https://iupap.triumf.ca/icnp/index.html>)
- WG11 (Gravitational Wave Intl Committee, since 1997; <https://gwic.ligo.org/>)
- WG13 (WG on the Newtonian Constant of Gravitation)
- WG15 (Soft Matter Physics)
- WG16 (Physics and Industry)
- WG17 (Centenary)

WGs that failed to submit a report to the EC&CC meeting of October 2020:

- WG2: Communication in Physics
- **WG10: Astroparticle Physics International Committee**
- **WG12: Energy**
- WG14: Accelerator Science

WGs that failed to submit a report to the EC&CC meeting of October 2021:

- WG7: ICUIL
- **WG10: Astroparticle Physics International Committee**
- **WG12: Energy**



There are WGs that have a life of their own (almost like an AC)

WG1 (Intl Committee for Future Accelerators; <https://icfa.hep.net/>)

WG7 (Intl Committee on Ultra-High Intensity Lasers; <https://www.icuil.org/>)

WG11 (Gravitational Wave Intl Committee; <https://gwic.ligo.org/>)

There are those that address a very specific issue and seem (are) temporary:

WG13: aims to understand the discrepancy between various measurements of the gravitational constant G .

WG17: Centenary

WG9 (Intl Coop on Nuclear Physics) seems to overlap quite a bit with C12:

From their 2017 report: One of the tasks of WG9 is to organize with regular intervals a Nuclear Science Symposium in order to be appraised of the currently most relevant nuclear science questions, to discuss the research efforts required to address these nuclear science questions, as well as to assess the research facilities in operation or planned for pursuing these research efforts [...] The yearly meetings of IUPAP WG.9 are held in conjunction with the IUPAP C12 meetings

There are WGs that might eventually become a commission; but what about the overlap with already existing commissions?

- WG15 (Soft Matter Physics)
- WG16 (Physics and Industry)

There are two that could eventually become commissions, but that seem to be doing quite well as WGs:

- WG5, Women in Physics, very active
- WG2, communication in physics, with ups and downs but could be very active



Then, among those who failed to turn in their reports in 2020 or 21:

WG14: WG on Accelerator Science, created in 2015. Its goal is to promote the exchange of information and views [...] on topics related, but not limited, to:

- the theory and experiments concerned with the nature and properties of particle accelerators and beam physics
- the improvement of international communication in Accelerator Science through the sponsorship of professional meetings
- the future of accelerator facilities for various fields that benefit science and society
- the industrial, medical, energy production and environmental applications of relevant accelerator technologies
- the accelerator technologies and connection to engineering.

Do we need this WG if there is ICFA? ICFA was created in 1976 with the aims:

- To promote international collaboration in all phases of the construction and exploitation of very high energy accelerators.
- To organize regularly world-inclusive meetings for the exchange of information on future plans for regional facilities and for the formulation of advice on joint studies and uses.
- To organize workshops for the study of problems related to super high-energy accelerator complexes and their international exploitation and to foster research and development of necessary technology.

- **WG10 Astroparticle Physics International Committee**; one of its aims is to engage in a continuous dialogue with “The Astroparticle Physics International Forum (APIF)” of the Global Science Forum (GSF) and to give scientific advice to APIF, whose members are appointed by funding agencies. The last piece of news on the APIF website is from 2012. On the other hand, C4 is the Commission on Astroparticle Physics. I don't think we need this WG.

- **WG12 Energy**. This one should be revitalized somehow, it is a very important issue. It could be turned into an inter-union structure with IUPAC maybe.

A possible way to move forward

Request some commission chairs to analyze and produce a report on certain WGs to be presented at the next EC&CC meeting so that we can then vote on their continuation and/or renewal at the GA in July:

- **C4** (+ C19?) should analyze the situation of **WG10**, Astroparticle Physics International Committee.
- **C12** (+ another commission?) should analyze the situation of **WG9**, International Cooperation in Nuclear Physics.
- **C3** (+ C6?) should give advice on whether **WG15**, Soft Matter Physics, should become a commission
- **C11** (+ another commission? + chair of ICFA?) should analyze the situation of **WG14**, Accelerator Science
- **C2**: it would be good to have their input as to for how long they think the Newtonian Constant of Gravitation WG (**WG13**) should continue to exist.

Then, the **EC** could come up with proposals for the future of **WG2** (communications, Jens), **WG12** (energy, Bruce) and **WG16** (physics and industry, Michel)

Based on these reports/proposals we will then be able to present resolutions on these WGs to be voted, hopefully, at the 2022 GA.



The last GA voted the creation of two new working groups for which the EC needs to appoint a chair. We are seeking your advice for this.

Working Group on Ethics (WG18) with the following mission:

1. To survey international ethics standards across societies, journals, and funding agencies, including hiring practices.
2. To consider these accumulated data to develop a set of international ethics standards.

This mission would first be applied to ethics concerning traditional scientific misconduct, including plagiarism, misuse of public funds, fabrication or misrepresentation of data, and accuracy in self representation. Later, in collaboration with WG-5, the mission would include ethical standards to prevent and establish lines of actions in cases of harassment and sexual misconduct.

Working Group on Quantum Science and Technology (WG19) with the following mission:

To analyze the creation of a new IUPAP Commission on Quantum Information Science and Technology. Supporting information for this proposal is available at the Indico page for our latest (30th) GA.

Possible names for chairs of WG18 on Ethics (and further ideas):

Ana Maria Cetto, current president of Mexican Physical Society. She was Council member of the Pugwash Conferences when this organization received the 1995 Nobel Peace Prize. She was Deputy Technical Director of IAEA and as such she was also participant of the 2003 Nobel Peace Prize.

Tony Meyer, he was Head of Strategy at the European Science Foundation and Director of the European Cooperation in Science and Technology Office. In 2007, he joined NTU in Singapore and, as of 2018, was the Europe Representative and Research Integrity Officer. He was co-chair and co-organizer of the 1st (Lisbon), 2nd (Singapore) and 5th (Amsterdam) World Conferences on Res. Integrity.

Editors in Chief of major journals— in particular, **Holden Thorp**, EiC of Science, **Michael Thoennessen**, APS EiC

Dan Dahlberg, U MN

Kate Kirby, Emerita CEO of the APS

Nan Phinney, Emerita deputy director of SLAC

Possible name for chair of WG19 on Quantum:

Michael Flatte, University of Iowa.

If you have any suggestion, please send them to secretariat@iupap.org within a month or so, so that we can have a proposal for our next EC&CC meeting