



# **IUPAP Working Group on Ethics (WG18)** Report

IUPAP GA, October 2024



# Background

- The 30<sup>th</sup> IUPAP GA approved the creation of WG18, with the following mission:
- To survey international ethics standards across societies, journals, and funding agencies, including hiring practices.
- 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 (e.g. plagiarism, misuse of public funds, fabrication of data).
- Later, it would include ethical standards to prevent and establish lines of action in cases of harassment and sexual misconduct.
- With the contribution of the Affiliated Commission on the History and Philosophy of Physics (AC6), IUPAP foresees to define guidelines to address ethical issues of great current concern.

# The Working Group

In November 2022 a small group of academics was formed, composed of:

- Prof. Regina Maphanga, CSIR, South Africa
- Prof. Maria Rentetzi, chair for Science, Technology and Gender Studies, Friedrich-Alexander Universität Erlangen-Nürnberg, Germany
- Prof. Abdullah Shams Bin Tariq , Department of Physics, University of Rajshahi, and Global Young Academy, Bangladesh
- Prof. Marshall Thomsen, Physics and Astronomy Department, Eastern Michigan University, and Online Ethics Center, University of Virginia
- Prof. Ana María Cetto, Instituto de Física, UNAM, and president of the Mexican Physical Society 2021-2023 (chair)
- Ex-officio member: Prof. Silvina Ponce Dawson, Physics Department, University of Buenos Aires, Argentina, and IUPAP president designate



# Previous IUPAP decisions

<https://iupap.org/strategic-plan/ethics-and-science-integrity/>

June 2022

- ▶ Guidelines have been established to address sexual harassment during IUPAP sponsored conferences and new regulations have been added to make decisions on awards.
- ▶ The [Waterloo Charter for Gender Inclusion and Diversity in Physics](#) also entails a list of good practice recommendations that are directly related to ethics and science integrity.
- ▶ Besides establishing rules of conduct for individual scientists, there are problems concerning undesirable behaviors by other players, e.g. solicitation to contribute to predatory journals and conferences.
- ▶ The IUPAP will take a lead in seriously combatting such predatory and/or fake practices in physics and applied physics.



# From the WG18 2023 report

The WG18 commissioned a **bibliographical survey and comparative analysis** of ethics standards of international, regional and major national scientific organizations and funding agencies,

With the aim to identify a set of standards **for IUPAP's own activities**, which at the same time can be a source of inspiration for the physics community at large.

This resulted in the document ***Ethics in Physics: Review (Final draft, Montserrat Contreras)*** presented to the WG in September 2023.



# Ethics in Physics: review

Outline:

1. INTRODUCTION
2. RESEARCH ISSUES
  1. Ethical issues in funding agencies
  2. Ethical issues in publishing
  3. Predatory journals and Open Science
3. PHYSICISTS INTERACTING WITHIN THE SCIENTIFIC COMMUNITY
  1. Ethical issues in research centers and universities
  2. Ethical Issues in Scientific Organizations and Associations
  3. Scientific Awards
4. PHYSICISTS INTERACTING WITH THE REST OF SOCIETY
  1. Professional ethical issues
  2. Science communication for all audiences
  3. Ethical Decisions in Choosing a Research Area
  4. UNESCO, Sustainability Policy
  5. Political and consultant sphere





# Core principles for the promotion of good practices

As a result of this review and subsequent discussions, WG18 has agreed a set of core principles to serve as a common platform:

1. Promote **good practices at all levels**, students, scholarship holders, teachers, researchers, etc.
2. Continually improve the level of **inclusiveness, equity, and respect** in the workplace.
3. Consider **the social implications** of the research topics.
4. Promote **disclosure of funding sources** in written and oral presentations.
5. Support **open and reliable publication systems** by choosing to use them for publication and by volunteering peer-review services.
6. Promote **ethics in physics education** through courses, seminars, and mentoring.



# Core principles cont.

7. Develop ways and tools that allow the **inclusion** of interested members in the **policy environment**.
8. Follow practices that ensure research is **carefully carried out** and **honestly reported**.
9. Promote professional advancement based on the **entire body of work** of a scientist rather than superficial measures such as the number of publications.
10. Seek procedures to bring advances and research **closer to society** in general.
11. Promote **workplace policies** that include clearly defined procedures for reporting and investigating allegations of unethical behavior in a way **that treats all parties with respect**.
12. Establish **clear penalties** for violating ethical standards.



# Specific tasks for WG18

## 1. Cases of harassment

- ▶ IUPAP has an **anti-harassment policy\***: all participants in Union activities will enjoy an environment which encourages the free expression and exchange of scientific ideas, and is free from all forms of discrimination, harassment, and retaliation.
- ▶ The conference organizers will name an **advisor** who will consult with those who have suffered from harassment and who will suggest ways of redressing their problems, and (an advisor) who will counsel those accused of harassment. The organizers may, **after due consideration**, take such action they deem appropriate.
- ▶ If harassment and/or discriminatory behaviors occur **during the organization**, particularly among conference organizers, the victim or witness of an incident can contact the **Gender Champion** or the **Associate General Secretary** who will analyze the incident with confidentiality and help achieve a solution.

\*32 IUPAP GA, October 2023, resolution 6.1: <https://iupap.org/wp-content/uploads/2023/10/Main-outcomes-of-the-IUPAP-General-Assembly-20231009.pdf>.

# WG18 recommends:

- ▶ As a **preventive measure**, introduce a screen warner at the beginning of the conference and/or parallel sessions, stating that it is a harassment-free environment and describing the procedure to be followed in case of harassment or discrimination. This will serve to **raise awareness and discourage bad practices**.
- ▶ Before the conference starts, consider appointing **an accompanying person** to support the participant who feels harassed and to act as a witness for any subsequent events during the conference.
- ▶ As part of the announcement, provide an email, phone number or some other **contact information** for those who do not want their case to be made public.
- ▶ In accordance with IUPAP policy, the organizers may, after due consideration, **take whatever action they deem appropriate – including legal action as a last resort**.
- ▶ IUPAP should consider having a consultant available on a regular basis to investigate such cases and **to be consulted as necessary**. This could be a **social worker or human-resources professional** with some legal background.



# Specific tasks for WG18

## 2. Cases of previous bad practices

- For the awards, IUPAP now asks those who nominate candidates to state that there are **no ethical issues** about the candidate that IUPAP needs to be concerned about.
- What if a person who has won an award is later “condemned” for a case of abuse or ethical violation? How much should IUPAP control **backwards** as well as **forwards**?
- How much should the condemnations be propagated, e.g. to the extent of **limiting** in some way the participation of the person **in conferences and other events**?



# WG18 recommends:

- ▶ As IUPAP already does for the awards, it should also ask **conference organizers** to take the necessary steps to ensure that there are **no ethical issues** about the conference participants that IUPAP needs to be concerned about.
- ▶ The scientific community has responded to cases where a person who has received an award is later accused or condemned for abuse or ethical violations, by **publicly discrediting** the person.
- ▶ In the case of **formal/legal condemnation**, the person should be prevented from participating in conferences and other IUPAP or IUPAP-sponsored events.



# Specific tasks for WG18

## 3. Conflicts of interest

- ▶ IUPAP needs **guidelines** for the functioning of its Commissions, to resolve possible **conflicts of interest** (for decisions on conference funding or on awards).
- ▶ IUPAP now has “**corporate associate members**” and would like them to be companies (to eventually have more funding). How should conflicts of interest be dealt with in this new environment?

## WG18 response

Over the coming year, **the Working Group will focus on this task**. To this end, it will examine what other scientific societies and organizations have done to deal with conflicts of interest of various kinds (e.g. professional, career-related, financial, corporate sponsorship).



# Additional WG18 considerations

- Ethical issues are **context- and culture- specific** to varying degrees
- International ethical standards must take into account the **diversity of contexts**.
- Ethical issues **evolve** and **new conflicts arise** as a result of
  - emerging technologies (e.g. AI, use of personal data, new communication tools),
  - global challenges (e.g. climate change, loss of biodiversity),
  - the spread of the malicious practices (e.g. predatory publishing),
  - growing inequities, social distress, changing geopolitical landscapes, etc.,
  - which add to persistent issues (e.g. discrimination).
- Ethical standards cannot be carved in stone but must be **critically reviewed and kept up to date**.
- ❖ These observations suggest that IUPAP should consider establishing a permanent **Ethics Committee**.