

IUPAP decisions, policies and activities to reduce the gender gap in physics

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Gender Gap in Science Project, Berlin, February
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About rules for IUPAP endorsed conferences.

Statement about harassment

IUPAP requires that supported conferences publish on their websites and in all publications related to the Conference a specific statement on harassment that says:

“The conference organisers 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 conference organisers may, after due consideration, take such action they deem appropriate, including warning or expulsion from the conference without refund.”

The Mexican Physical Society tried to impose a similar rule for its conferences and it couldn't do it because of anti-discrimination national regulations. The president received a call from an national agency against discrimination. IUPAP changed it slightly.

The 29th IUPAP General Assembly passed a resolution that addressed the "need to encourage IUPAP-sponsored conferences to have a session for all participants on Diversity and Inclusion in Physics. We are still discussing what to ask exactly.

So far the suggestion is to include among the conditions that conferences should fulfill to be considered for sponsorship the following paragraph:

“IUPAP requires that an activity be organized during IUPAP-sponsored conferences that would stimulate the discussion among ALL conference participants on DIVERSITY AND INCLUSION IN PHYSICS. Examples of possible activities include: a plenary session or talk, a brief presentation followed by an exhibition that remains open a significant amount of time during the conference, a survey on the issue to be responded by conference participants, etc”

The Waterloo Charter

A declaration of principles on inclusivity in physics +
Guidelines to advance towards a more inclusive practice.

It was initiated at the 5th IUPAP International Conference for Women in Physics, Waterloo, Canada, August 2014.

It is based on the rubrics of the Baltimore Charter and the Pasadena Recommendations formulated by the American Astronomical Society in 1993 and 2003.

It is also shaped and guided by the principles dictated by Project Juno initiated by the Institute of Physics, UK.

Its main body contains the declaration of principles and the rationale for its need.

It is appended with a set of recommendations for key players of the physics community at all levels to implement strategies that will enable women to succeed within the existing structures of physics and allow the desired acceptance of diversity to develop fully.

The latest draft presented at the last IUPAP Executive Committee meeting received a few suggestions of modifications. It is then expected that it will be approved by the next IUPAP General Assembly in 2020.

Waterloo Charter for Women in Physics

We hold as our guiding principles that:

- People of all genders are equally good in doing excellent science and deserve equal opportunity.
- Diversity contributes to excellence in science so that the full participation of people of all genders will enhance excellence in the field of physics.
- Both thought and action are necessary to ensure equal participation for all.
- The attainment of equal opportunity should be measured by outcomes. Thus, as long as the percentage of women in the next level of advancement does not equal the percentage in the pool, equal opportunity cannot be considered to exist.
- Long-term change requires periodic evaluation of progress and consequent action to address areas where improvement is necessary.

Physics has a long and honorable tradition of participation by women who have made significant and highly creative contributions to the field. However, the percentage of female physicists remains low. It is increasingly clear that scientific careers are strongly affected by social and cultural factors, and are not determined solely by merit. The search for excellence that unites all scientists can be maintained and enhanced by increasing the diversity of its practitioners. Great discoveries thrive on cross-cultural diversity. The attainment of such diversity needs revised criteria for judging excellence, free of cultural perceptions of talent and promise.

Current available data on the relative numbers and career histories of women and men in science reveals widespread discrimination: access to the profession, like graduate education, hiring, promotion, and funding, is not always independent of gender. Discrimination can be subtle or unintentional and yet creates a non-conducive atmosphere that not only discourages and distresses women but also alienates them from the field. Such discrimination can only damage the profession. Current recruitment, training, evaluation and award systems often prevent the equal participation of women. Formal and informal mechanisms that are effectively discriminatory are unlikely to change without intervention.

The IUPAP has long assumed the responsibility of implementing strategies within its own organization to improve the situation and increase the number of women physicists. The IUPAP is not only committed to introduce changes in its own structure but also to encourage the adoption of policies by institutions, scientific societies, funding agencies and other key players of the scientific endeavor that may enable women to succeed within the existing structures of physics and allow the desired acceptance of diversity to develop fully. To achieve these goals, a set of policies, action and recommendations pertaining to affirmative action, career paths and institutional policies are spelled out in the Appendix. The IUPAP strongly advises the Physical Societies of its country members to abide by the principles of this Charter and to encourage the adoption of the recommended policies adapting them to the particularities of their own countries.

Followed by an Appendix with context + recommendations

Activities

International Women in Physics Day

This was approved by the IUPAP GA held in Singapore in 2014.

WG5 decided to observe it on February 11th, coinciding with the International Day for Women and Girls in Science as established by the UN.

For February 11, 2019 a Facebook and Twitter account were created associated to this day.

Given that the creation of the Working Group on Women in Physics was approved by the General Assembly of March 1999, the idea is to launch a contest for its logo and as a first step to fully celebrate it in 2020.

As usual, in 2020 we are going to have the 7th International Conference on Women in Physics

ICWIP2020 will be held in Melbourne, Australia

DATES: 20 JULY 2020 - 23 JULY 2020

EVENT DESCRIPTION:

Universal access to science, and participation in science, is a principle that runs through the activities of the International Scientific Union and its member unions, including the International Union of Pure and Applied Physics (IUPAP). IUPAP has recognised a particular need to foster the participation of women in physics. The IUPAP Conference series on Women in Physics, organised by IUPAP Working Group 5, has a history not only of success and growth but of making a difference in the physics community.



At ICWIP2020 we expect to have: Donna Strickland, Physics Nobel Prize winner in 2018, "for their method of generating high-intensity, ultra-short optical pulses." First woman to obtain the Nobel Prize in Physics in 55 years!

Information and discussion on the Gender Gap in Science Project will be an important part of the conference

2022-2023: celebration of the IUPAP centennial

As part of the celebrations we expect to have

1. **The IUPAP Centennial Symposium, marking the opening of the IYBSD, at CERN, in 2022;** in addition to the Symposium we could organise other activities for a younger public, outreach public talks celebrating physics and basic sciences, a physics-student challenge, hands on experiments organized by the commissions, webcasting to other communities elsewhere in the world - or having other events in parallel elsewhere - because physics is ubiquitous and IUPAP a global organization;
2. **Information material on the Centenary** (and on IUPAP, to make it more visible) i.e. production of a logo, leaflets, focus articles, editorials in newsletters, ppt presentation, a glossy brochure reviewing the history of IUPAP and looking forward to its future, actions on social media..
3. **An anniversary book on the history of IUPAP**, profiting from the occasion to make order in the IUPAP archives and digitize them (however, this may need a professional historian);
4. **Satellite events elsewhere in the world** emphasizing IUPAP's global dimensions and reach, without forgetting e.g. small labs from low-resource countries that struggle in teaching physics and performing research.

We will include a gender perspective in all these activities + we expect to have our own "history" book, i.e., a book about the women in physics movement and the role played by the IUPAP in its advancement.

2022: International Year of Basic Sciences for Development

Proposed by the representative of IUPAP at the 10th Scientific Board of the International Basic Sciences Programme (IBSP) of UNESCO on January 2017, 24th. The proposal was very well received by the Board and received the support of representatives of ICSU (International Council for Science), IUPAC (International Union for Pure and Applied Chemistry), ICTP (Abdus Salam International Center for Theoretical Physics), EPS (European Physical Society) and CERN (European Organization for Particle Physics). Soon after, the proposal was presented to the French and Swiss Ambassadors to UNESCO and also received their firm support. It was also discussed with UNESCO's director of Science Policy and Capacity Building, Executive Secretary of IBSP, who was also very supportive of the initiative.

The choice of the year 2022 for celebration of The International Year for Basic Sciences for Development is motivated by IUPAP's centenary and the centenary of the Nobel Prize award to Niels Bohr.

Having this year will allow us to advance with the agenda to reduce the gender gap in science in developing countries.

Some activities I've participated of representing the IUPAP

International Conference of Mathematicians, Rio de Janeiro, Brazil, August, 2018. Round on table on: "The Gender Gap in Mathematical and Natural Sciences from a Historical Perspective". I gave the talk "Gender related policies of the International Union of Pure and Applied Physics (IUPAP)". Two papers related to this activity will appear in the Proceedings of the Conference.

Presentation of book on the Gender Gap in Science Project from a Latin American Perspective, Lima, Peru, October 2018 (more on this tomorrow)

Other activities related to the Project

The Latin American Workshop of the project
Universidad de los Andes, Bogota, Nov 22-24, 2017



Attended by 30 participants (by country: Argentina (4), Brazil (3), Chile (2), Colombia (12), Costa Rica (1), Cuba (1), El Salvador (1), Mexico (4), Peru (1), USA (1). By union: MU (3), IUPAP (4), IUPAC (2), ICIAM (1), IUBS (1), IAU (3), IUPHST (1), ICSU-ROLAC (2), GenderInSite (1), AIP (1), Social Science Experts (3) + 8 participants from Colombia).

led to various “spin-offs”

The Book

During the Workshop we decided to publish a book with information on good practices in the regions that we had collected.

Contributions have been written by Workshop participants. We have collected all of them and are into the final steps of correction and editing.

The book is being published by the Mexican Physical Society with funds from the Project.



Editors:

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Will be printed soon. It will also be available for downloading from a website.

We are planning to send it to institutions of research and higher education in Latin America and the Caribbean. We expect it will serve as inspiration to design and apply policies to reduce the gender gap in science in the region.

We also expect it will be of interest for the scientists of the region to learn about existing initiatives.

Future activities of the Latin American chapter

We will have a closing Latin American activity at ICTP-SAIFR in Sao Paulo, Brazil in October, 2019.

2019 Activities

Meetings/Programs/Workshops

2019 Meeting of Scientific Council and Steering Committee
February 4-5, 2019

ICTP-SAIFR/FAIR Workshop on Mass Generation in QCD
February 25 – March 1, 2019

2019 Workshop on Perspectives in Nonlinear Dynamics
July 15-19, 2019

Workshop on American Monsoons
August 19-24, 2019

ICTP-SAIFR Program on Particle Physics
September 30 – November 30, 2019

Workshop on Determination of Fundamental QCD Parameters
September 30 – October 4, 2019

Workshop on Skills for Young Scientists/Increasing Diversity in Physics
October 7-11, 2019

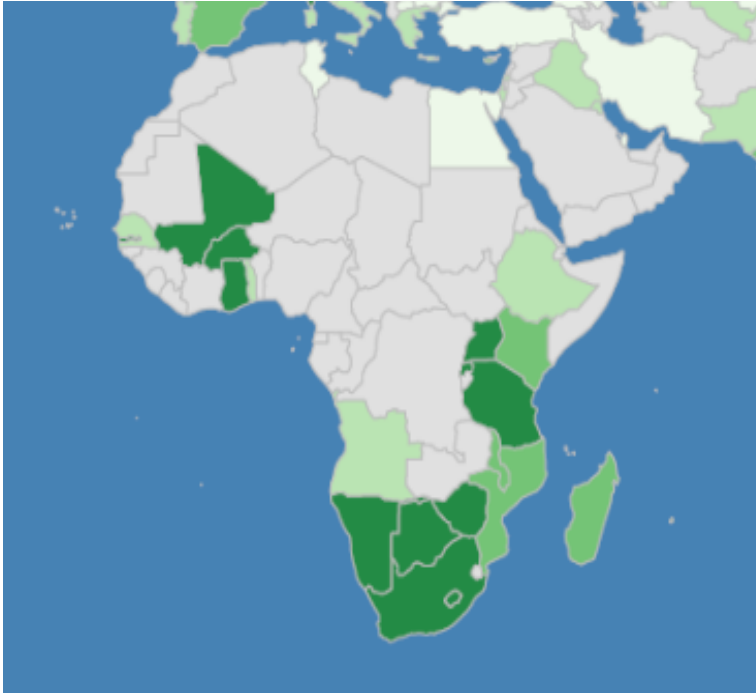
Workshop on conformal field theories, tensor categories and Nichols algebras
October 16-18, 2019

Dark Universe Workshop – Early Universe Cosmology, Baryogenesis and Dark Matter
October 21-25, 2019

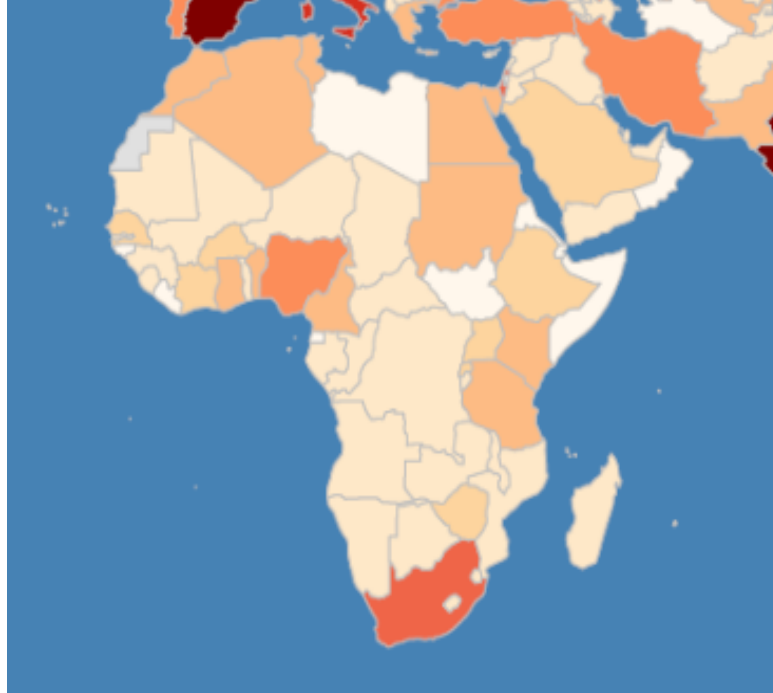
As in Bogota, it will combine a Workshop for Young Scientists and the closing activity where we expect to have some survey results.

It will cover inclusion in a more general sense (beyond gender).

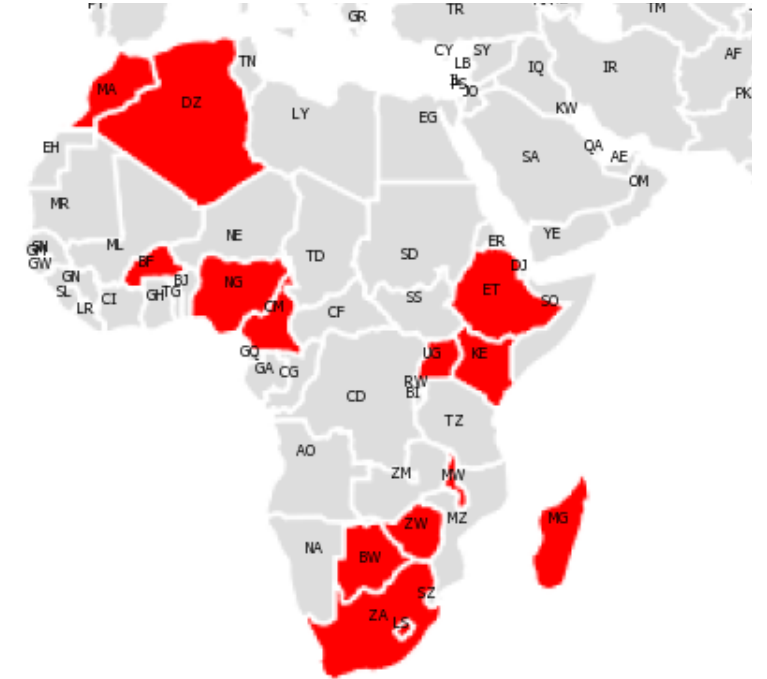
Interesting to note...



Proportion of respondents
2/1/2019



Number of respondents
2/1/2019



Represented at African
workshop 1-2/12/2017



Thank you!