



IAU Executive Committee Women in Astronomy Working Group Annual Report 2022-2023

Members

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Priya Hasan (Co-Chair)

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David Valls-Gabaud (France)

John Leibacher (USA)

Josefa Masegosa Gallego (Pepa) (Spain)

Jolanta Nastula (Poland)

Lili Yang (China)

Aya Bamba (Japan)

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Santiago Vargas Domínguez (Colombia)

1. WG activities and developments since August 2022

The WiA WG continued to organize activities following their four point workplan on (i) Awareness & Sustainability, (ii) Training and Skill Building, (iii) Fundraising and career retention & (iv) Dissemination and communication of results via conferences, newsletters, etc. laid by its OC members since September 2021. These efforts of the WG has contributed to create awareness on the difficulties (bias, reduced career prospects, leaky pipeline and lacking role models, childcare issues, harassment, discrimination, unfair working conditions) faced by Women Astronomers and helped the careers of young women Ph.D. students worldwide.

Since August 2022, the WiA WG has initiated many activities for women astronomers all over the world to build an active and support-providing community. These activities are listed below:

I- Awareness & Sustainability- for students, early career to senior level researchers

1. **August 2022- IAU General Assembly 2022 Busan, South Korea-** IAU WiA WG organized a focused session to address the Gender imbalance issues faced by Women in Astronomy and STEM, organized the Women in Astronomy mentoring and lunch sessions- <https://iauwiaga.sciencesconf.org/>
2. **September 2022-** IAU WiA WG online discourse Seminar on ‘**Women in Astronomy: Still a long way to go!**’ with speakers- Mamta Pommier (IAU-WiA Chair, France), Arianna Piccialli (IAU WIA OC member, Belgium) in Europlanet Science Congress 2022, Granada, Spain, 18–23 Sep 2022, EPSC2022-1175, 2022. <https://meetingorganizer.copernicus.org/EPSC2022/EPSC2022-1175.html>
3. **November 2022-** IAU WiA WG Seminar press release on ‘**Status of Women in Astronomy**’ - by Mamta Pommier, Arianna Piccialli- https://www.europlanet-society.org/europlanet-magazine/#dearflip-df_25406/50/

4. **December 2022-** IAU WiA WG Seminar series on ‘**Training and Skill Development for Women: Is that the answer?**’ for Europlanet Equality and Diversity Working Group- by Priya Hasan (IAU-WiA co-Chair, India)- <https://sites.google.com/view/iau-women-in-astronomy/home/upcoming-events-and-seminars?authuser=0>
5. **January 2023-** IAU WiA WG, SKA Outreach and EDI teams of UK and India jointly organized the Seminar series on ‘**Awareness about Gender balance, Equality Diversity and Inclusion and outreach in Astronomy**’ at the Indo-French Astronomy meeting ‘SKA/MSE and multiwavelength synergies -<https://ifcam-2.sciencesconf.org/resource/page/id/11>. Seminars were presented by Mamta Pommier, Jake Noel-Storr (IAU EDI WG lead member, The Netherlands), Niruj Mohan (SKA India outreach WG lead member), William Garnier (SKAO and communication Director, United Kingdom), Shari Breen (SKAO and EDI WG lead member, United Kingdom)
6. **February 2023-** IAU WiA WG and OAO jointly organized the ‘**Women and Girls in Astronomy**’ event to promote International Women and Girl’s Day in Science- <https://www.iau.org/public/women-and-girls-in-astronomy/>
7. **February 2023-** IAU WiA WG Seminar on ‘**Girls in Astronomy and IAU WiA WG activities**’- was given by Priya Hasan to promote Girls career in Astronomy- <https://sites.google.com/view/iau-women-in-astronomy/home/upcoming-events-and-seminars?authuser=0>
8. **February 2023-** The WiA WG has also supported the activities of **Standing Committee for Gender Equality in Science (SCGE)**
9. We have also introduced a new awareness activity this year on our website- ‘**Report Harassment and provide Testimonials**’ where we are continuously updating the harassment issues report to us anonymously by astronomers (all genders) worldwide- <https://sites.google.com/view/iau-women-in-astronomy/home/testimonials-and-harassment-issues?authuser=0>. You are welcome to report and provide Testimonials to the Women in Astronomy WG chair. Please note that these responses are received anonymously in our surveys and not focused to any specific individual but to series of repeated issues being faced by Women in Astronomy and STEM fields !

II- Training and Skill Building- from students, early career to senior level researchers

1. **October 2022-** IAU WiA WG Training Program series1 on ‘**Stellar Photometry with LCO**’ - by Priya Hasan- <https://sites.google.com/view/iau-women-in-astronomy/home/upcoming-events-and-seminars/training-program-4>
2. **November 2022-** We have also introduced a new training activity this year on our website- ‘**Projects, jobs and fundings**’ where we provide a space to students from college to University level to do short-term projects with the WG members or look for jobs and fundings- <https://sites.google.com/view/iau-women-in-astronomy/home/projects-jobs-fundings?authuser=0>. You are welcome to send your jobs or projects queries to the Women in Astronomy WG chair. An Internship was offered on ‘**Galaxy classification**’ to a undergraduate student from Lyon, France under this training program by Mamta Pommier.
3. **January 2023-** IAU WiA WG Training Program series2 on ‘**Optical and HI spectral line data analysis school**’ organized by Mamta Pommier, Ramya Sethuram (IIA, India), Jyoti Yadav(IIA, India), Prerana Biswas(IISc, India), Sougata Sarkar(IISc, India), Sai Wagh(IISc, India) at the Indo-French Astronomy meeting ‘SKA/MSE and multiwavelength synergies -<https://ifcam-2.sciencesconf.org/resource/page/id/11>

III- Dissemination and communication-for whole community

1. *Due to heavy workload involved in organizing the above activities, lack of funds and volunteers who can devote time to organize these activities, write monthly newsletters and reports, we have produced no newsletter since last IAU WiA annual report in April 2022.* However, the information related to the events were distributed on the social media channels and IAU WiA WG website. The events in the above items were also streamed via Zoom and YouTube channels, and attracted on average 100–200 participants per live event. The recordings of these public events are available on our WiA WG YouTube channel and website. These virtual series have received a lot of appreciation by the community.

IV- Fundraising and career retention- from students, early career to senior level researchers

1. *4 attempts have been made by the WG chair for fundraising to support the research activities and career of Women in Astronomy worldwide, however it has been unsuccessful as of now.* Further, many institutions are still in the discussion phase of the gender imbalance in research, but lack policies and concrete action plan to increase the women astronomers recruitment to permanent positions at different career levels.

2. Developments since last year

Last year (Sep 2021-Aug 2022) saw a lot of progress in the IAU WiA activities, thanks to their active communication channel, social media network, reports and newsletters. The efforts made by the Chair, Co-Chair, OC, WG, EC, and IAU office members as well as the global astronomy community who have participated in our activities and shared their invaluable support and experiences, have resulted into:

1. a new successful survey focused on Women's Careers in Astronomy and the impact of Covid 19 with a participation of almost 150 researchers. Results of these surveys are being analyzed and may serve as a database for funding agencies to counter gender balance issues while evaluating funding proposals.
2. Training > 400 graduate students and early career researchers globally to attain essentials skills in Astronomy research
3. several awareness program series for the International Astronomical community
4. joint projects with the other IAU offices and promoted inclusive astronomy events at the school level where students have participated from all over the world.

Overall, the working group has led again several successful activities in the last 6 months.

3. Closing Remarks

The current IAU WiA WG statistics shows that only 1.6% of IAU members (Fig. 1) are a part of the IAU Women in Astronomy Working group. This astonishingly low number reflects in the-

1. poor engagement of the members in the WiA WG activities
2. lack of action oriented policies to support Women career in Astronomy worldwide by gender balance and inclusivity committees existing since decades in research organizations, universities and International organizations
3. no or very marginal funds to support the career of Women in Astronomy
4. lack of organization of focused talks during Plenary sessions to bring these serious issues in notice to the Astronomy community worldwide.

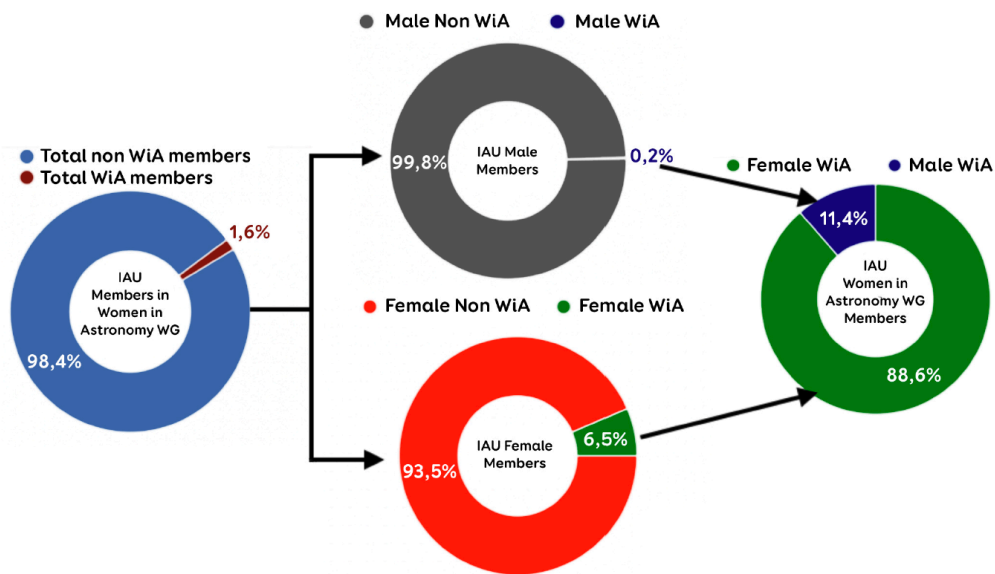


Figure 1: IAU Women in Astronomy Working Group members.

The deficit of role models and Women in Astronomy is unfavorable to their career sustainability and growth and renders STEM fields unhealthy and unsafe due to growing gender imbalance at every career stage. A clear action-oriented plan to bring in new inclusive hiring policies, efforts, and support from research organizations, and funding agencies is mandatory to bridge the gender gap and help the IAU, EU commission and other global organizations gender balance vision programs for the next triennium to be successful. While the new OC of the IAU WiA WG continues to put in extensive efforts, *it has still not been successful in gaining financial support to retain the career of Women in Astronomy and help achieve gender balance.*

The WiA WG has once again initiated efforts at the IAU EC level to provide funds to support the career of Women in Astronomy under ‘*STEM Ambassador*’ program, and we are hope for positive outcomes.

4. Publications

1. IAU Women in Astronomy Working Group activities and survey results- 16th Europlanet Science Congress 2022, held 18-23 September 2022 at Palacio de Congresos de Granada, Spain. Online at <https://www.epsc2022.eu/>, id.EPSC2022-1175-<https://ui.adsabs.harvard.edu/abs/2022EPSC...16.1175P/abstract>
2. The IAU-Women in Astronomy Working Group and Inclusivity, Shah, P., Pandey-Pommier, M., et al. -<https://ui.adsabs.harvard.edu/abs/2022RMxAC..54..129H/abstract>

Mamta Pommier (Chair)
on behalf of the IAU Women in Astronomy WG