EXECUTIVE COMMITTEE WORKING GROUP OF JUNIOR MEMBERS

Co-chairs

Camilo Delgado-Correal Hannah Stacey

Organising Committee

Anupam Bhardwaj Hongwei Ge Brianna Smart Sabine Thater Jeremy Tregloan-Reed Stefan Wallner Mustafa K. Yıldız

TRIENNIAL REPORT 2021-2024

The Working Group (WG) of IAU Junior Members (JMs) focuses on topics that are crucial to early career astronomers across the globe. This includes careers, teaching, mobility, wellbeing, financial security, transparency and diversity. JMs represent the majority of active astronomers worldwide, which represent the future of the field, but also provide an invaluable influx of skilled workers to all branches of society.

1 Election of the Organising Committee (2021-2024)

The organising committee (OC) 2021-2024, was elected in August 2021 by 191 Junior Members (21.4% turnout). The OC elected Camilo Delgado-Correal and Hannah Stacey as its co-chairs. The OC meets approximately every 2 months and has ongoing communication via the OC Slack space. In total, from August 2021 to April 2024, we had 13 meetings. A screenshot from one of our OC meetings is shown in Fig. 1.

2 Activities of OC in 2021–2024

2.1 Social Media

We have various social media channels to facilitate communication with our members and other early career researchers (ECRs):

- Slack space (358 members)
- Twitter (https://twitter.com/IAUJuniorMember; 263 followers)
- YouTube (https://www.youtube.com/channel/UCZQsB5LY2Tv_tj9ddVdnPuw; 327 subscribers, 16 videos, 100–500 views per video)
- Facebook (https://www.facebook.com/IAUJuniorMember; 262 followers)

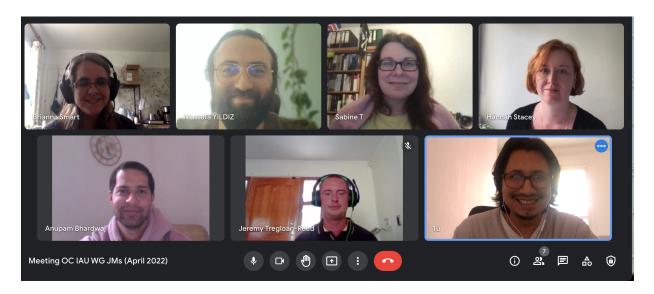


Figure 1: April 2022 meeting of the Organising Committee.

2.2 IAU General Assembly 2022

The working group had four sessions at the XXI IAU General Assembly in Busan, Korea in August 2022¹. We collaborated with the organisers of the Korean Young Astronomers to provide support for our sessions. The content of the sessions was

- outreach and public communication, led by Lina Canas, Matipon Tangmatitham and Lars Lindberg Christensen;
- writing grant and telescope proposals, led by Richard de Grijs and Vincenzo Mainieri;
- scientific writing, led by Johan Knapen and Nushkia Chamba;
- and a networking/discussion meeting for Junior Members, led by Hannah Stacey.

The scientific writing and proposal writing sessions were by far the most well-attended of the four sessions, suggesting that the junior members are most interested in career development. We kept this feedback in mind when organising the sessions in our sessions at the 2024 General Assembly. Fig. 2 shows some images from the sessions.

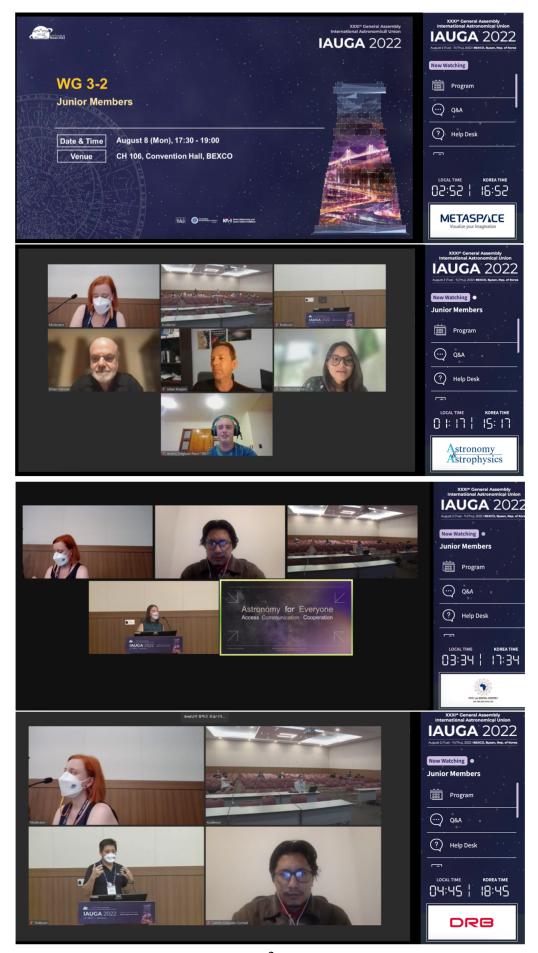
2.3 IAU General Assembly 2024

The working group will have four sessions at the XXI IAU General Assembly in Cape Town, South Africa in August 2024². We expect the content of the sessions to be

- an outreach roundtable involving Tshiamiso Makwela, Markus Pössel, Kevin Govender, Joyful Mdhluli, Kelly Blumenthal and Camilo Delgado-Correal, and a talk from Nadeem Oozeer entitled *Unlocking Inclusive Outreach: Connecting Minds to Science*;
- talks on scientific writing skills from Zhanwen Han and Christopher A. Tout;

 $^{{}^{1}}http://www.iauga2022.org/program/program_06_7.asp?sMenu=abo6\\$

²https://astronomy2024.org/working-group-2-junior-members/



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Figure 2: Junior Member sessions in the IAU GA 2022

- a discussion on the potential of networks to support Early Career Researchers involving Anica Miller-Rushing, Amanda Barrera, Kelly Blumenthal, Nicolas Bonne, Yasmin Catricheo, Bret Feranchak, Gretchen Stahlman and Tiffany Stone Wolbrech, and a talk on *Science Diplomacy* by Camilo Delgado-Correal;
- talks from Dominic Gregory Vertue and Sandra Benítez Herrera on the *Astronomy for Mental Health Project*, and from Jacqueline Antwi-Danso on *The Role of Peer Mentoring in Astronomy*.

2.4 Discourse series

We have continued the Discourse Series of talks aimed at Early Careers Astronomers where these talks cover topics including careers inside and outside astronomy, science highlights, public engagement, and professional development.

The first talk was given by Dr Vanessa Moss (CSIRO), with the topic *Beyond academia: observatory-focused career pathways in astronomy*. Our virtual talks are usually given in 'traditional' virtual formats (e.g. Zoom), but do not necessarily draw optimal interaction and engagement from audiences. We collaborated with The Future of Meetings³ initiative to host the meeting within AltSpaceVR⁴: this platform simulates realistic interactions to allow participants around the world to interact more meaningfully. The event was also live-streamed on YouTube for those who could not access AltSpaceVR.

We had 82 registrants for the talk, the demographics of which are shown in Fig. 4. The breakdown by gender suggests a fair distribution of genders in the registrants. The most common country of residence was South Africa, demonstrating that these talks can be successful at reaching ECRs outside of Europe and in developing countries. Only one-third described themselves as postdocs or junior researchers, with a large contribution from students. 63 of the registrants indicated that they would like to join our mailing list, representing a significant increase in our subscribers.

We estimated the actual number of attendees inside AltSpaceVR was 20, excluding organisers, and an additional 35 on the YouTube live-stream. We reached out for feedback on the talk to understand if there is interest in using this format for future talks or informal meetings: the overall response was that participants were or might be interested in using VR platforms for future IAU JM meetings, although there were some technical issues with gaining access to AltSpaceVR.

The most recent talk was given by Dr. Dr. Alicia Maravelia from the Hellenic Institute of Egyptology, entitled *Astronomy in Ancient Egypt: From Heliacal rising of Sirius to the Ramesside Star Clocks* ... *and Beyond*⁵. The talk was live-streamed on YouTube using StreamYard and the audience could participate via the live chat feed. The video can be viewed on our YouTube channel and currently has 215 views (Fig. 5).

3 Closing remarks

Over these three years, we have strived to maintain the working group as a connection between IAU Junior Members around the world. We view the Junior Members Working Group as an opportunity to recognize our cultural diversity and raise the voice of early career astronomers. This is a platform with which we can discuss sometimes difficult topics such as mental health and financial concerns

³https://thefutureofmeetings.wordpress.com/

⁴https://altvr.com/

⁵https://sites.google.com/view/iaujuniormembers/home

related to career instability. The Junior Members Organising Committee is itself run by early-career astronomers, many of whom share these struggles. We recommend increased financial support for the OC that allows us to attend General Assemblies, without relying on personal travel funds, such that we can provide in-person sessions on behalf of the Junior Members.

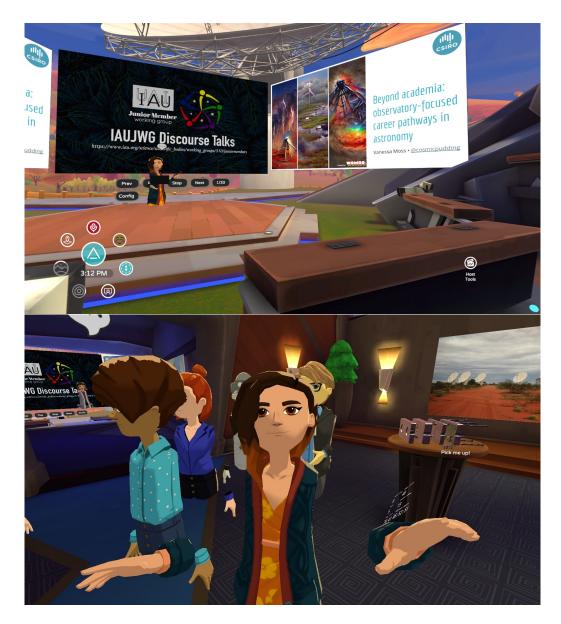


Figure 3: Screenshots of the talk by Vanessa Moss in AltSpaceVR, featuring interactive exhibits and a giant model radio telescope.

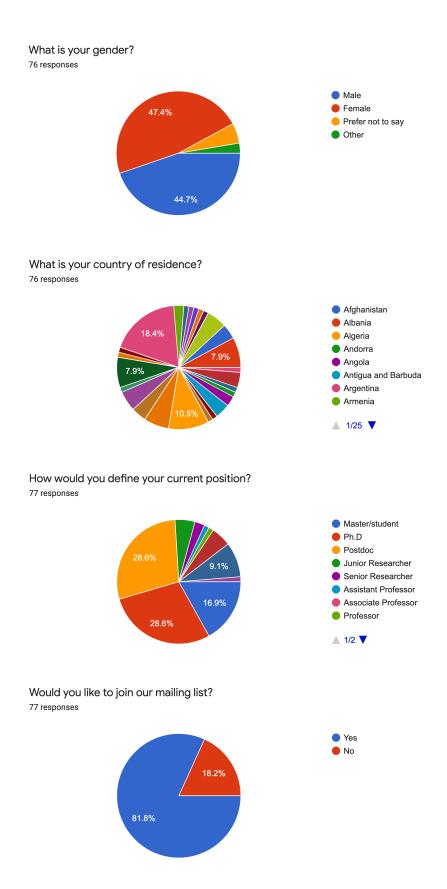


Figure 4: Statistics of registrants of the 17 Discourse Series talk. The most common country of residence for attendants was South Africa (18.4%).



Figure 5: Screenshot of the talk by Dr. Dr. Alicia Maravelia, Astronomy in ancient Egypt: From Heliacal rising of Sirius to the Ramesside Star Clocks ... and Beyond.