



IAU Catalyst | September 2022



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1

Executive Committee

1.1 Outcomes of the XXXIst General Assembly in Busan

Debra Elmegreen
IAU President

What a remarkable two weeks in Busan! The XXXIst General Assembly (GA), the first held in the Republic of Korea, was an affirmation that we can carry on the IAU's 100+ year history of gathering together to discuss astronomy and forge new friendships and collaborations. The lively exchanges underscored the value of being able to meet face-to-face again, along with a virtual component. From a behind-the-scenes look at exciting Webb images, sessions on science ranging from asteroseismology to cosmology, sessions on global coordination, development, outreach, teaching, pro-am work, and more, the GA covered all aspects of the IAU mission. In keeping with our strategic goals, the inaugural Outreach, Development, and Education (ODE) prizes were presented, along with Gruber Fellowships and PhD Division Prizes. We congratulate Hyesung Kang, the National Organizing Committee, the Professional Conferences Organiser (PCO), the IAU Secretariat, and the hosts, Korean Astronomical Society (KAS) and Korea Astronomy and Space Science Institute (KASI), for successfully achieving the first hybrid IAU GA. We also thank the many volunteers and the GA sponsors.

During the GA, the IAU Office for Astronomy Outreach (OAO) launched a new NameExoWorlds competition to celebrate its 10th anniversary. There was an inaugural toast to the new Center for the Protection of Dark and Quiet Skies from Satellite Constellation Interference (CPS), whose work was highlighted during a Focus Meeting. The business meeting of the GA, including resolutions, took place virtually in August 2021; for our one additional business item at this GA, the National Members voted to accept Georgia as a new National Member.

One of the duties and privileges of the Executive Committee is to select the location of future General Assemblies. Following outstanding presentations and proposals to host the GA in 2027, the EC voted for the XXXIIIrd General Assembly to be in Rome, Italy, which hosted the 1st GA in 1922 and the 8th in 1952.

The flag handover to South Africa during the Closing Ceremony launched the countdown to the XXXIInd GA in

2024. Until then, the IAU family will continue working towards the goals of our Strategic Plan, which resonate with this GA theme of “Astronomy for All”. Participants departed with fond memories of beautiful Busan - boats, beaches, bulgogi, bridges, buildings, and especially building bonds, which is the essence of our General Assemblies. See you all in Cape Town!



Figure 1.1 Current and past officers and the head of the IAU GA LOC: José Miguel Espinosa (General Secretary), Teresa Lago (Past General Secretary), Ewine van Dishoeck (past President), Hyesung Kang (Head of GA LOC and IAU Vice-President) and Debra Elmegreen (President) (from left to right). Credit: IAU/GA2022 NOC



Figure 1.2: Hyesung Kang Debra Elmegreen and Jinah Park (left to right). Credit: IAU/GA2022 NOC

1.2

The General Assembly Comes and Goes

José Miguel Espinosa
IAU General Secretary

The General Assembly (GA) in Busan was successful on all fronts. For the talks – including the invited ones – for the active participation, for the organisation, and for the special feeling of this particular General Assembly as a whole: seeing colleagues and friends in presence after so long.

The Exhibition Hall was a place for meeting people and seeing people. Busan, with its high-tech industry, was present. The IAU Offices and new Center were present. There were exhibitions from India, South Africa, the Republic of Korea, and many other places. Truly, it was a place to meet and learn from people from all over the world. It was not just a place for professional exchanges and future collaborations – where professors, postdocs, and students worked together and brainstorm about their research – but it was a place for shared joy, where people could get excited by science, learn new perspectives, or simply share a coffee between the busy scientific sessions.

Near the conclusion of the GA, the IAU flag was passed from the Republic of Korea to South Africa in a very emotional ceremony. South Africa, with its cutting-edge astronomical research, its 10-metre telescope, SALT, and its incredible participation in SKAO, is the perfect place for the next General Assembly of the IAU. The XXXIInd GA in 2024 will be the first time a General Assembly is celebrated in Africa. The South African organisation is moving all of its forces to mobilise and involve the African astronomical community, so it is represented in full at the GA in 2024.

We hope that the 2024 GA will be a milestone in the African astronomical community and truly an African event: from its community to its community - a gathering that will transcend frontiers, engage underrepresented communities and inspire the next generation of African astronomers.

Indeed, the General Assembly comes and goes!



Figure 1.1.: An overview of the interactions at the Exhibition Hall. Credit: IAU/GA2022 NOC



Figure 1.2.: The Exhibition Hall is full of life. Credit: IAU/GA2022 NOC



Figure 1.3.: Takalani Nemaungani and Vanessa McBride hold the IAU flag during the closing ceremony of the XXXI IAU General Assembly. This symbolises the handover from Busan, where the XXXI IAU GA was held, to Cape Town, where the XXXII IAU GA will be held in 2024. Credit: IAU/GA2022 NOC

1.3 Reflections on a Rollercoaster Triennium

Ewine F. van Dishoeck,
IAU Past President

Just back from the successful General Assembly (GA) 2022 in beautiful Busan, I have been asked to briefly reflect on the 2018-2021 period. It was a rollercoaster triennium, celebrating IAU 100 in 2019 with thousands of activities across the globe, only to be followed by the COVID-19 pandemic in early 2020 and finding new ways of working together ever since.

Preparation started well before 2018, when Debra Elmegreen and I began writing the IAU Strategic Plan 2020-2030. Significant progress is being made on its implementation, thanks also to the capable work of past General Secretaries. Most notably, the IAU now has four well-functioning Offices, each of them with a regional office and worldwide networks of national contacts. The Working Group on Global Coordination of Ground and Space Astronomy has been revived, the Junior Member category has been established, and actions to make our field more diverse and inclusive have been strengthened. Thanks to successful fundraising, the IAU now has annual Shaw-IAU education workshops, new IAU Hands-On workshops to train early career astronomers to use large data sets, an annual multidisciplinary Kavli-IAU symposium, support for the CAP conference, and coordination of the annual IAU Women and Girls in Astronomy programme. The IAU also diversified its portfolio of prizes with the inaugural Outreach, Development and Education (ODE) Prizes presented in Busan.

The pandemic caused hardships across the globe but also showed us the advantage of virtual meetings, in which researchers from around the world can join and present their work at almost no cost: please continue to do so! However, in-person meetings remain essential for people to get to know each other and trigger new ideas through unstructured discussions. Hybrid meetings now seem to be the new norm, also for environmental reasons, but how well they will work for large intercontinental meetings across many time zones is yet to be explored.

As with any organisation, new challenges can emerge at any time. In 2019, it became clear that our clear skies are

now being threatened by swarms of small satellites. The IAU and its partners organised major online workshops in 2020 and 2021, resulting in detailed reports that made recommendations for mitigating actions, including pushing the issue with UN-COPUOS and establishing the new Centre for the Protection of the Dark and Quiet Sky from Satellite Constellation Interference (CPS).

Thanks to the pandemic, everyone is familiar with the concept of bubbles: small groups of people that only interact with each other but not with the rest of the world. The importance of the IAU, and especially its General Assembly, is that it takes you outside your daily bubble, giving you the full perspective of the field and enabling you to make worldwide connections that are more important than ever to build respect, trust and support for each other in times of conflict.

Hence, let's uncork some bubbles to the IAU as it embarks on its next century. In the words of Harriet Tubman (1822-1913): *"Every great dream begins with a dreamer. Always remember, you have within you the strength, the patience and the passion to reach for the stars to change the world."* Unlocking this strength in everyone through "Astronomy for All" (the GA 2022 motto!) is exactly what the IAU aims to do. A million thanks to everyone that made this a great triennium!

1.4 Overview of the Past Mandate

Teresa Lago,
Past General Secretary

My tenure as General Secretary (September 2018-2021) was very challenging. It included the implementation of the IAU's first global Strategic Plan 2020-2030, which called for timely action, as well as notable events in the life of the Union, such as the centenary celebrations.

Once in office, I soon realised that much more was needed than just implementing the strategic plan. There was also an urgent need for management initiatives to prepare indispensable instruments for an international organisation. Several key policy documents were missing, and others already in use required a thorough review:

- Rules and Guidelines for Scientific Meetings (2018), a concise document to replace a previous set of rules with many gaps and duplications;
- Rules and Procedures for IAU missions (2018);
- The IAU Code of Conduct to include ethics and anti-harassment (2019);
- Change of admission of individual members to annual (2019);
- IAU Communication Policy Guidelines (2020).

At the same time, an in-depth review of the IAU website was carried out, in terms of structure and content, to enhance the institutional brand.

The creation of the new IAU Office of Astronomy for Education (OAE) was launched in October 2018 with an international call for partnership. The enthusiastic response from 23 member countries on all continents, and even additional inquiries from non-member countries, made the selection of the winning proposal quite difficult. The process was completed in December 2019 with the signing of an agreement with the Max Planck Society for the Advancement of Science to host the OAE. And the OAE started activity in January 2020.

This triennium also served to consolidate international partnerships for the remaining IAU Offices, through the review of the agreements with:

- the Norwegian Academy of Science and Letters (2019), involving the enhancement of the Office of Young Astronomers (OYA);

- the National Astronomical Observatory of Japan, including a profound restructuring of the Office for Astronomy Outreach (OAO);
- the National Research Foundation of South Africa for the Office of Astronomy for Development (OAD).

At the end of the triennium, the four IAU Offices had a similar clear structure and coordinated a worldwide network of regional nodes and hundreds of national teams in over 100 countries.

An agreement with the CNRS-INSU (2019) resulted in the IAU Paris Office being hosted free of charge.

Another major achievement of the triennium was the creation of Catalyst in 2019 - a new concept for the IAU Bulletin revived after a long hiatus. Catalyst is intended to be a tool for direct communication between the various structures and members of the IAU and with other international scientific organisations.

The triennium was also very successful in relation to sponsoring organisations: the Kavli Foundation, the Gruber Foundation and the Shaw Prize Foundation, which since 2019 has funded the annual Shaw-IAU Workshop on "Astronomy for Education" organised by the OAE.

Of course, this triennium was also unique due to the pandemic and its impact on our lives and practices. For the IAU, which is all about cooperation, networking, knowledge-sharing and public engagement, it was a huge challenge: the Paris Office was closed for over a year, most scientific meetings and other activities planned for 2020 and even 2021 were postponed or canceled, including the XXXIst General Assembly, with the exception of the business sessions held in virtual format in August 2021.

Even so, the IAU did not stop and reacted to the circumstances. We knew that the IAU was created in difficult times. We now also know that it can continue and even thrive in very difficult and unusual circumstances. The IAU is indeed an impressive and vibrant organisation!

2

IAU Divisions, Commissions & Working Groups

2.1

Working Group
Meeting on Global
Coordination of
Ground and Space
Astrophysics,
August 8-10,
IAU General
Assembly, Busan

Rachel Somerville &
Roger Davies

International coordination is ever more essential for tackling complex science problems with the large suite of facilities on the ground and space in the next decades. This working group meeting provided a forum to discuss how to improve coordination of global planning, build toward future projects, and how to facilitate Open Data.

The first session focused on the landscape of new, large facilities that will be coming online over the next decade. For this session, we asked three people to communicate with agency and project heads about a specific set of questions related to coordination and report on their findings. We heard from Rachel Osten about the current programmes and future plans of large space missions from NASA, ESA, JAXA/ISAS, and ISRO, from Matthew Colless on large ground-based facilities, including the large optical ELTs and the SKAO and ngVLA radio facilities, and on coordination of ground and space facilities from Ewine van Dishoeck. Coordinated work with ground-based telescopes is most effectively built into space missions from the very start when the science case is written. If this is left until close to launch, it is both harder to achieve and often less effective.

The second session featured speakers who highlighted how coordination could enhance or lead to breakthroughs in specific science areas, including exoplanets, stellar populations, black holes, galaxies/ISM, and cosmology. The third session covered the landscape and unique challenges facing multi-messenger astrophysics in the coming decade. This session featured a summary of the Kavli-IAU 2020 meeting in Cape Town on transient science and facilities presentations representing ground-based GW facilities, LISA, neutrino, and gamma-ray/cosmic ray facilities. The session concluded with a panel discussion on coordination for multi-messenger science. Many of these cases emphasised the need for large, often inter-disciplinary, teams to address key science questions leading to questions about how and whether astronomers are being trained to work effectively in such teams.

The last session hosted a panel discussion on the future roles of existing facilities, including ING, GMRT, NRAO facilities, Subaru, the NOIRLab portfolio, and SALT/MeerKAT. Representatives from these projects spoke about how they see the use of their facilities evolving over the next decade as more capable systems start operating. This session closed with a discussion of the coordination of archive centres with representatives from IVOA, NASA, NOIRLab, and ESO.

Some common themes that emerged were 1) broad support for Open Data but different conventions about what “Open Data” means; 2) the challenges of increasing data volume and complexity; the increasing importance of multiwavelength and time domain science; and the increasing importance of Machine Learning and Data Science; 3) training the next generation of scientists for the different skill set that will be needed in the next decade.

2

IAU Divisions, Commissions & Working Groups

2.2

Updates from the Executive Committee Working Group for Professional-Amateur Relations in Astronomy

John Hearnshaw

The Executive Committee Working Group for Professional-Amateur Relations in Astronomy was established in April 2021 with an Organizing Committee of 13 people. The co-chairs were Aniket Sule (India) and John Hearnshaw (New Zealand) until August 2022, at which point Tim Spuck (USA) replaced John Hearnshaw as a co-chair.

In late 2021, the Working Group (WG) conducted a worldwide survey of amateur societies and associations and of individual amateur astronomers in order to ascertain the level of interest in future research collaborations between professionals and amateurs and their interest in other proposed WG activities. We received replies from 956 amateurs and from 156 amateur associations in many countries. IAU professional astronomers were also invited to participate in the survey, resulting in 269 replies. All of these replies were used to form a useful database of amateurs and amateur associations for future contacts.

The survey showed there to be strong support from amateurs to participate in collaborative research projects with professionals. The WG hopes to address this in three ways. First, in the near future, we will establish a website to help facilitate such collaborations. The WG will also promote a biennial workshop for amateur and professional astronomers, possibly beginning in April 2023. A third project is further to promote the IAU Office for Astronomy Outreach programme, Meet the IAU Astronomers!, in which IAU members will visit (in-person or virtually) amateur associations to discuss topics in astronomy. With the easing of the pandemic, we hope that many in-person meetings can now take place between IAU members and amateur societies.

In addition to the Organizing Committee, the WG invites members from the IAU professional and from amateur communities to become pro-am WG "members at large".

These are people who are interested in supporting the work of the WG and who want to stay in touch with the WG's activities.

Those interested in joining the membership at large should contact Aniket Sule at email aniket.sule@gmail.com.

3.1 It's Time for Africa! An Invitation by the National Organising Committee IAU GA 2024

Vanessa McBride,
*Deputy Director of the
IAU Office of Astronomy
for Development (OAD)*

Kevin Govender,
Director of the OAD

Africa is preparing to take centre stage as host for the next IAU General Assembly in 2024. Affectionately known to locals as the 'Mother City', Cape Town, in the Republic of South Africa, will welcome global astronomers from the 5th to the 16th of August 2024. Cape Town provides visitors with natural beauty in the form of its beaches, mountains, and the beautiful Kirstenbosch botanical gardens. It's also a melting pot of cultures, where you're less than an hour away from the renowned winelands of Stellenbosch, "Shisa Nyama" at Mzoli's and Robben Island (where Nelson Mandela was imprisoned for 18 years).

The city and surroundings also play host to a variety of world-class astronomy facilities and organisations, including the South African Astronomical Observatory, the South African Radio Astronomy Observatory, the Inter-university Institute for Data Intensive Astronomy, the African Astronomical Society, the IAU Office of Astronomy for Development and the Iziko Planetarium, as well as multiple universities with strong astronomy programmes. Africa is also home to new and exciting astronomy infrastructure projects, such as the Southern African Large Telescope and the MeerKAT radio array in South Africa, and the High Energy Stereoscopic System in Namibia.

As the first IAU General Assembly (GA) to take place on the African continent, the community's excitement is palpable! GA 2024 is more than just a meeting -- it encompasses the aspirations of the African astronomy community and is an opportunity to change the way the world sees Africa. These audacious ambitions have been captured in our Vision2024, available to explore on our conference website: www.astronomy2024.org.

We invite all astronomers to come and be part of the excitement and share in the African spirit of Ubuntu: We are all One!

Please visit our website, astronomy2024.org, to find out more. Follow us on Facebook (@Astronomy2024CapeTown) or Twitter (@astronomy2024).



Figure 3.1: Penguins at Boulders Beach, Cape Town. Credit: IAU OAD



Figure 3.2: Aerial view of Cape Town. Credit: IAU OAD.

4 Scientific Meetings

4.1

The XXXIst General Assembly in Busan

Hyesung Kang
*Chair of the
IAUGA2022 NOC*

For the first time in IAU history, the XXXst General Assembly (GA2022) was held in a hybrid format from August 2-11 in Busan, South Korea. More than 2,000 astronomers from 82 countries gathered together under the theme of "Astronomy for All" and presented work from about 1,700 research papers. Roughly 1,200 attendees came to Busan in person, while about 800 virtual attendees participated in the GA2022 remotely. The National Organizing Committee (NOC) is especially grateful to the 700 in-person attendees from aboard, who underwent several complicated entry procedures due to the COVID-19 pandemic.

Both in-person and virtual attendees were able to watch all live-streamed oral sessions at the meeting platform, as well as the recorded videos of all sessions, which were uploaded a few days later. In addition, web-based galleries of e-talks and e-posters were available for viewing 24/7 at the GA2022 website. All participants could exchange local information, ask questions to the presenters, and discuss various issues at the specific channels assigned to each meeting using the Slack networking lounge. Despite a few minor initial glitches, the participants gave a "thumbs up" to the overall execution of the hybrid format.

In-person attendees came to the e-Poster area in the Exhibition Hall for face-to-face discussions with the presenters, visited exhibit booths to collect many goodies, and experienced the local culture provided by the Busan Tourism Organization. Social events such as the Young Astronomers Lunch and Women in Astronomy Lunch were highly popular, with the participation of more than 200-300 mentees and mentors at each event.

In line with the "Astronomy for All" theme, there were many public outreach programs organised by the GA2022 NOC. Two public lectures by Sheperd Doeleman and Brian Schmidt were attended by more than 1,500 participants both onsite and online. In addition, four public lectures were delivered in Korean at Busan Science Museum and a star party was held

at the outdoor square of BEXCO. A Network for Astronomy School Education (NASE) Workshop was offered to local school teachers during the GA2022. For foreign participants, several free tours and paid tours of Busan and the surrounding areas were offered as well.

Considering the fact that we are still in the midst of the COVID-19 pandemic, the new hybrid GA was well executed and received many high praises from the participants both onsite and online. The NOC is deeply indebted to all participants for the successful GA2022.



Figure 4.1: IAU Officers and the IAU Executive Committee at the GA 2022 Opening Ceremony. Credit: Pam Ivey on Unsplash.



Figure 4.2: IAU GA 2022 Group Photo. Credit: Pam Ivey on Unsplash.

5

IAU Offices

5.1

**IAU Office for Astronomy
Outreach 10th Anniversary:
Astronomy for Everyone
Through Access,
Communication and
International Cooperation**

Lina Canas

*IAU Office for Astronomy
Outreach (IAU OAO) Director*

Kelly Blumenthal

IAU OAO Deputy Director

Building on the unprecedented momentum created by the International Year of Astronomy in 2009, the IAU Office for Astronomy Outreach (IAU OAO) was launched in 2012 as a joint venture between the IAU and the National Astronomical Observatory of Japan. Over the last decade, the IAU OAO has helped to coordinate many large-scale international projects, such as Cosmic Light (2015), NameExoWorlds (2015, 2019, and now 2022), the largest in-person CAP Conference to date in 2018, the first virtual and hybrid CAP conferences in 2021 and 2022, respectively, the IAU 100 years celebrations (2019) and the first IAU Symposium on Equity, Diversity and Inclusion (2019). The IAU OAO has accomplished all of this and more by building and relying upon an active network of experts - the IAU National Outreach Coordinators (NOCs) - as the backbone for the IAU's international outreach implementation.

In 2022, the IAU OAO celebrates its ten-year anniversary: a celebration to honour the communities that have shaped the IAU's outreach programmes into the successful initiatives we are proud to support today. This decade, we will expand our Annual Programmes, strengthen our skill-building projects with the recently formed Communicating Astronomy with the Public Trainings, build programmes that leverage astronomy to tackle issues that threaten the planet and our night skies, develop new programmes driven by the IAU Strategic Plan 2020-2030 and the emergent needs of our communities, and increase the opportunities for our NOCs to learn, share, and connect. These will all inform new online and hybrid projects, drawing from our experience of establishing effective collaborations that heavily rely on remote relationships.

In addition, as announced during the IAU General Assembly in Busan this August, the IAU has relaunched a special edition of NameExoWorlds. This international competition will bring together professional astronomers and the wider public, including teachers, students, and amateur astronomers. In this way, NameExoWorlds 2022 embodies the OAO's motto, *Astronomy for Everyone*, by providing all with the opportunity

to name 20 of the first exoplanetary systems to be observed by JWST.

With international collaboration, sustainability, and the IAU Strategic Plan 2020-2030 at the strategic core of the IAU OAO, we are reshaping our actions and structures for the next decade. The IAU OAO has recently expanded to include a Director, Deputy Director, and International Outreach Officer, all of whom have a sense of shared responsibility to work with and for our communities.

We envision the IAU outreach communities as bridge-builders, facilitating access to information and reaching new partners – from professional astronomers to the general public – thus perpetuating our efforts to make astronomy accessible to everyone.



Figure 5.1: The IAU Office for Astronomy Outreach logo and motto of taking astronomy to everyone. Credit: IAU OAO.

6

Cooperation with other Unions and Organisations

6.1

The International Year of Basic Sciences for Sustainable Development

**Vanessa McBride,
Willy Benz,
Kevin Govender &
Ram Venugopal**

This year, 2022, is the International Year of Basic Sciences for Sustainable Development (IYBSSD). The focus this year is on the United Nations (UN) Sustainable Development Goals (SDGs), and the role that basic sciences play in reaching these goals. Also sometimes called fundamental sciences, the basic sciences may not have obvious immediate applications to the SDGs, yet this curiosity-fueled research is a cornerstone of societal development.

At the International Astronomical Union (IAU), we recognise the role of basic sciences, such as astronomy, in achieving the UN's Agenda 2030 for Sustainable Development. This is made explicit in the mission statement of the IAU: *"to promote and safeguard the science of astronomy in all its aspects, including research, communication, education and development, through international cooperation"*. This is clearly visible in action through the establishment and work of the IAU's Office of Astronomy for Education, the Office for Astronomy Outreach, and the Office of Astronomy for Development (OAD). Since 2011, the OAD has awarded over a million Euros of IAU funding to over 200 projects around the world, through its annual call for proposals, targeting audiences in more than 100 countries. It has also established 11 regional offices globally, each of which coordinate astronomy-for-development activities in their respective geographic or language regions.

In addition to financial support for these astronomy-for-development projects, the IAU has also engaged with other scientific unions on programmes that are specifically related to development. For example, the Gender Gap in Science initiative, run from 2017 to 2019, was a collaborative undertaking between the IAU, a number of other science unions, and the United Nations Educational, Scientific and Cultural Organization (UNESCO), to measure and understand the gender gap in mathematical, computing and natural sciences.

Furthermore, the IAU OAD, teaming up with the International Science Council (ISC)'s Regional Office for Africa, hosted

a Science for Development workshop in Cape Town, South Africa, in early 2020. The theme was “Building bridges between disciplines”, and one of the outcomes was a multi-disciplinary honours level course on “Science for Development”, to be run at the University of the Western Cape in South Africa for the first time during 2022.

In his public lecture at the General Assembly in Busan, Shep Doeleman explained that “*basic science always pays off, you never know when, but it’s always a good investment.*” As the community of IAU members, let’s use 2022 to focus on what astronomy and other basic sciences can do for development.

More information:

- The International Year of Basic Sciences for Development: <https://www.iybssd2022.org>
- The IAU Office of Astronomy for Development: info@astro4dev.org



Figure 6.1: Some of the potential impacts of astronomy on the UN Sustainable Development Goals. Credit: IAU OAD.

7 IAU Timeline: Dates and Deadlines

7.1

IAU Dates and
Deadlines from
September 2022 to
February 2023

2022

September 12th to 16th

Communicating Astronomy with the Public 2022, Hybrid Event, Online and In-Person Sydney, Australia

September 15th

DEADLINE for Letters of Intent for 2024 IAU Symposia, Focus Meetings, Division Meetings and Institutional Meetings

DEADLINE (Stage 2) OAD Annual Call for Proposals Applications

September 30th

Letters of Intent Published

October 1st

IAU Individual & Junior Membership Application Process Opens

December 1st

DEADLINE for Proposals for IAU Symposia, Focus Meetings, Division Meetings and Institutional Meetings at the General Assembly in 2024

December 15th

DEADLINE for Nominations for the Gruber Foundation Cosmology Prize

DEADLINE to Accept Individual & Junior Membership Applications (from the applicants)

DEADLINE for PhD Prize Application Submission

2023

February 15th

PhD Prize Application Submission Opens for Next Year

Opening for Nominations for the Gruber Foundation
Cosmology Prize for Next Year

DEADLINE for the Review of Membership Applications by
the Respective NCA, Adhering Organization or Division
Presidents

Upcoming IAU Meetings are listed online [here](#).

8

IAU Publications

8.1

IAU Publications March - September 2022

The IAU publishes scientific results and information in all areas of astronomy. IAU Publications comprise primarily the Information Bulletin and the Proceedings of the IAU General Assemblies and other scientific meetings sponsored by the IAU.

Here we present Catalyst readers with a summary of the recent publications and updates.

For further information regarding the full documents please go to our official website IAU.org [here](#).

IAU Books

During the period of March to September 2022 the IAU published 2 new IAU Books. Find them online [here](#).

IAU Symposia

During the period of March to September 2022 the IAU published 2 new IAU Symposia. Find them online [here](#).

IAU Brochures

During the period of March to September 2022 the IAU published 1 new IAU Brochure. Find them online [here](#).

IAU Commission Reports

During the period of March to September 2022 the IAU published 24 new IAU Commission Reports. Find them online [here](#).

IAU Working Group Small Bodies Nomenclature Bulletins

During the period of March to September 2022 the IAU published 12 new IAU Working Group Small Bodies Nomenclature Bulletins. Find them online [here](#).



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Managing Editor: Lina Canas

Editor(s): Lina Canas and Kelly Blumenthal

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Cover: The second-largest bridge in South Korea is the Gwangandaegyo or Diamond Bridge in Busan. It connects Haeundae-gu to Suyeong-gu. Credit: Busan Tourism Organization

