

# CHAPTER IV

## THIRTIETH GENERAL ASSEMBLY

### CLOSING AND HANDOVER CEREMONY

Thursday, 30 August 2018

Austria Center Vienna

#### 1. Dance I

The Closing and Handover Ceremony began with a group photo, followed by a traditional folk dance and a welcome from the Master of Ceremony and incoming President Ewine van Dishoeck.

#### 2. Closing Address by the Retiring IAU President

*Dr. Silvia Torres-Peimbert*

Dear friends, It has been a great honor for me to serve the Union as President for the past three years. Like any organization that aspires to be useful to its constituency it requires continued supervision. I am very grateful to those that have participated in the administration and development of the Union. The General Secretary carried a big responsibility in running this organization. In this task the President Elect and the Assistant General Secretary have participated continuously. The members of the Executive Committee, the Division Presidents, Commission Presidents and Working Group Presidents, as well and the many Steering Committees have contributed in different tasks. All these colleagues generously have strengthened this organization with their time and ideas. In addition, I want to recognize the Secretariat that has worked very efficiently to accommodate all the ever-increasing demands from all of us.

I am personally delighted by the selection of the next Officers and Executive Committee that under the direction of Ewine van Dishoeck will lead this organization to higher levels.

Again, I wish to express my warmest thanks and deep appreciation to our Austrian colleagues, the National and the Local Organizing Committee, under the leadership of Prof. Gerhard Hensler, for the impeccable running of the General Assembly and its convivial atmosphere.

Next year is the centennial anniversary of the IAU, and I expect that all of us upon returning to our home town will spread the enthusiasm to celebrate this event. I wish

you all a safe trip home and I expect to see you all in 2021 in Busan for the XXXI IAU General Assembly.

### 3. Closing Address by the Retiring General Secretary

*Dr. Piero Benvenuti*

Dear Colleagues, dear Friends, there is a substantial difference between the incoming talk of a General Secretary and his outgoing one: the first may be interesting, it talks about the future, it opens up expectations and occasionally can even provoke viral criticism on social networks...

On the contrary the latter risks to be extremely boring, particularly since it comes after two weeks during which I have been pestering you with Statutes, Rules, crazy Resolutions...

What has been done during the past triennium is in front of you, you can judge by yourself if it was good or bad without much else to add – the only thing I want to highlight is that I enjoyed very much working with my colleague Officers, Silvia, Ewine and Teresa: personally and professionally it has been a remarkable high time.

Anyway, it is not my intention to waste the unique opportunity I have to talk to such a large audience of distinguished colleagues, therefore I decided to turn my outgoing speech into an incoming one.

Incoming in my new, craved position of retired astronomer. Retired from my University, three years ago, retired from the position of General Secretary, few minutes ago.

I will tell you about my future personal plans, which however are well related to the fantastic experience of the past three years, during which I had the opportunity to encounter so many diverse cultures, all united by the same passion for our beautiful science, astronomy.

I rediscovered, if ever proof were needed, that astronomy knows no barrier of any sort, because it is deeply rooted in our aspiration in a better world and in our significant position in the cosmos, beyond the space-time constraints.

But then, coming back to my western culture, I suddenly realized how much our cosmological knowledge has lost the profound impact it had in the ancient times. Today, philosophy and theology continue to proceed in their quests as if the Copernican revolution never happened.

We know how this occurred: when Galileo, in the fatal nights of the winter of 1609 opened the new window on the sky, he also shattered down the crystalline spheres of the Aristotelian cosmology, but obviously he could not replace it with an equally satisfactorily model of the world. Only today, I would say after the longed detection of the gravitational waves and the fantastic ALMA images of the planetary systems' formation, we can say that the Copernican revolution is complete.

But philosophers and theologians seem to ignore the fact and keep reasoning in terms of absolute concepts of space and time, giving more relevance to the “being” rather

than to the “relationship,” while we urgently need a revised philosophy of nature that develops a solid ontology of our “entangled” world, in which the classic distinction among rocks, plants, animals and conscious beings is replaced by a unified network of relations.

We, the scientists, are partly co-responsible for the current unsatisfactorily situation, possibly because we are insisting too much, in our outreach actions, in the purely scientific content of our discoveries, with less attention to its far reaching global cultural consequences.

This is the challenge I wish to pursue in my new job, rocking the boat of world religions, in particular of Christian theology, following the path traced by my masters: Andrea Zanzotto, a great Italian poet and my school teacher, George Lemaître, who saved a Pope from saying naiveties about Creation and Pierre Teilhard de Chardin.

I may even propose an IAU Symposium on the subject for Busan, so that eventually I will enjoy, as I hope you all did here in Vienna, the real participation in a General Assembly!

Therefore: Auf-widersehen in Busan!

I cannot leave the podium and the General Secretary position, without expressing a couple of much deserved acknowledgements. The first to Rosaria and Madeleine for their professional and personal dedication to the Union and for the understanding and support they gave to my crazy mini-revolution in the management of the Office. They are now not just IAU “employees,” they are the backbone of the Union... and, just for the record, the video about the IAU that you watched yesterday is essentially the work of Rosaria.

However, the second greatest thank goes to my wife Beatrice: during these three years she sustained me with her wisdom and sometimes with her very justified and constructive criticism. Without her constant help I would not have been able to complete my task maintaining mental sanity... And during the last three months, when I became essentially invisible, both physically and psychically, she refrained from asking divorce just because she loves me dearly: thank you!

#### 4. Address by the Incoming President

*Prof. Ewine van Dishoeck*

Dear colleagues and friends,

It is a great honor for me to address you as the new President of the IAU. Together with my husband Tim de Zeeuw, I attended my first IAU General Assembly in 1979 in Montreal at the invitation of the then President, Adriaan Blaauw. I was still a MSc student in theoretical chemistry, but it was a fantastic experience to be there, seeing and talking to all these famous astronomers like Chandrasekhar! I could never have dreamed that I would be standing here in front of you 40 years later.

The IAU organization depends on astronomers dedicating their “free” time to make the IAU work, and over the last three years we have been fortunate to have an extremely capable group at the top: Silvia Torres-Peimbert as the “heart” of the

IAU, Piero Benvenuti working night and day as the GS supported in the Paris Office by Rosaria d'Antonio and Madeleine Smith-Spanier, Teresa Lago having an increasing load as AGS, and with overall help from very active Vice Presidents and Division Presidents. Also, the extremely capable support by the IAU press officer Lars Lindberg Christensen and the ESO team on website and databases is essential. Many thanks to all of you; the biggest applause should undoubtedly go to Piero. I look forward to working closely with the new Officers, Teresa, Debra Elmegreen and Ian Robson, and the new Executive Committee and Division Presidents, to hopefully make the running equally smooth. With three, and soon four, IAU Offices, this is no small enterprise compared with a decade ago. In the Strategic Plan we quoted the Indian philosopher Rabindranath Tagore: "You can't cross the sea by simply standing and staring at the water." We need the help and support of many of you to make our dreams into reality.

So, "what are you going to do as President?," I got asked a lot in the corridors. When I became President-elect three years ago I had a number of goals. The first of them was to promote the presence of young scientists in the Union, and I was pleased to find at our first meeting in Paris that the other Officers had exactly the same priority. So now we have the Junior Member category. The challenge will be for the Junior Member WG to develop activities worldwide that benefit their development and to learn best practices from each other. They can also help to promote astronomy worldwide, and I look forward to working with them. A second goal was to provide a more comprehensive overview of the IAU as a whole: where do all our activities, many of them new, fit in the bigger picture? What are we missing and where are overlaps? What are the mandates of the various Offices? This has resulted in the writing of the Strategic Plan 2020–2030, mostly together with Debra, so it will be our joint responsibility that the list of actions in that plan are implemented. As an example, further promoting Women in Astronomy, and more generally Diversity and Inclusion in the IAU, is high on that list.

Celebrating the IAU 100 years will keep me very busy in 2019, but it is also a fabulous opportunity to give many of our Strategic Plan goals a boost and show to our fellow scientists, policy makers, teachers, educators and general public what a century of astronomy has brought to society. Fundraising both for IAU100, OAD and IAU as a whole will be part of this.

Another area that I feel strongly about is the Global Coordination of Large Facilities, a WG that has been elevated to report directly to the Executive Committee. Astronomy is an observationally driven field, so progress requires new increasingly larger telescopes and instrumentation that can see sharper, deeper and more sensitive than previous facilities. Astronomy has been fortunate to have an armada of new telescopes and satellites across the electromagnetic spectrum over the past decades, with multimessenger facilities ramping up. But this steady stream of new facilities cannot be taken for granted. We are already seeing that some of our dreams, like the 20–40m class telescopes on the ground, are taking longer to come to fruition. Large scientific infrastructures are no longer the domain of just the astronomers and the physicists: other areas such as the Atmospheric Science, Geochemistry, Life sciences, and even the Humanities and Social Sciences, require increasingly large facilities as well (often in the form of large databases) to advance their field. They now also have the ears and eyes of the funding agencies and politicians (don't underestimate this!). Global collaboration or coordination in astronomy is therefore increasingly important as the costs and preparation to build, and especially operate, our forefront facilities and missions escalate. The IAU provides

a neutral forum to bring various parties together and foster collaboration at an early stage. With support of the Kavli foundation we will be stepping up our WG activities.

This brings me to the final aspect that I would like to bring to your attention. The wheel that was on the cover of the 2010–2020 Strategic Plan, and that is also included in the 2020–2030 plan, illustrates in a powerful way our links with other fields, ranging from technology and large data, to other sciences and culture. Without often realizing it, astronomy is very dependent on developments and work in these fields. Without fundamental physics and material sciences we would not have the progress in detectors, telescope components and control, etc. A program like CLOUDY, used by hundreds of astronomers, required a century of work and funding by thousands of atomic and molecular physicists to get all the input basic data: spectroscopy, oscillator strengths, collisional rate coefficients. More generally, science is becoming more and more inter- or multi-disciplinary, and a shift is happening already at funding agency level, with new funding going primarily in that direction. As a field, we need to be prepared for this shift, and this means fostering and enhancing collaborations and making scientists from other fields feel welcome in our midst. This is another form of Inclusion, but equally important. I would therefore like to encourage more interdisciplinary IAU Symposia in the coming years, on average at least one per year. We have seen an excellent example here at the GA with the Origins symposium, with speakers from geochemistry, atmospheric science and biology. The 2016 Gravitational waves symposium was another example, together with physics, and in 2019 there will be the first IAU Laboratory Astrophysics symposium. Perhaps a next one could be on big data together with informatics.

Finally, I would like to end with some wise words from the past. Antoine de Saint Exupéry wrote: “If you want to build a ship, don’t drum up people to collect wood and don’t assign them tasks and work, but rather teach them to long for the endless immensity of the sea.” Taking the freedom to modify this quote to apply to the IAU, it becomes: “If you want to do astronomy, don’t drum up people to collect components and don’t assign them tasks and work, but rather teach them to long for the endless immensity and beauty of the Universe.” Ultimately it is this inspiration, this quest to determine our place in the Universe, what it is all about and that drives us all: scientists, engineers and technicians alike. I look forward to take the IAU into its second century with you in the coming years.

## 5. Address by the Incoming General Secretary

*Prof. Teresa Lago*

Dear colleagues, I feel privileged to become IAU General Secretary today. It is an exciting time to get closer involved with IAU. Let me explain why: In terms of science, IAU is going through a particularly healthy period. My reasons for this statement are based on one aspect of my recent experience as AGS - the duties associated with the IAU meetings. The last 3 years have been unique, even record breaking, in terms of competition to organise scientific meetings under the umbrella of the IAU:

- 33 proposals for IAU Symposia for 2017, although only 9 could be supported,
- 69 proposals for Symposia & Focus Meetings for 2018, of which we could only select 3 Symposia outside the GA, and 7 Symposia plus 15 FM for the GA programme,
- 30 proposals for IAU Symposia for 2019, from which 9 could be selected.

I see this as a signature of a vibrant community.

This sentiment was further strengthened by the competition to organise the 2024 General Assembly: IAU received 7 Letters of Intent. Once again, a record breaking which led to the need to adopt a two-step selection process in order to avoid wasting time and money on the part of the proponents and also to allow for the proper discussion and evaluation of the full proposals. The more complete information requested from bidders was used for a pre-selection and subsequently the complete proposals were requested only from the four pre-selected bidders.

This large number of proposals reflects the relevance of IAU to member countries.

There is yet another reason for my enthusiasm: the IAU Strategic Plan for 2020–2030. This is the first time IAU has prepared and approved a Strategic Plan that clearly defines the mission - to promote and safeguard astronomy in all its aspects through international cooperation - and goes further giving a comprehensive overview of the Union's general activities, how they fit together and how they complement each other. The goals proposed for the decade are:

- global coordination of Astronomy,
- the dissemination of knowledge among professional astronomers and the inclusive advancement of Astronomy in every country,
- the use of Astronomy as a tool for development and for education,
- the engagement of the public with Astronomy through communication.

Allow me to emphasise the key words: coordination, dissemination of knowledge, inclusive advancement, tool for development and for education, engagement of the public. I take these keywords as the guidelines for my mandate as General Secretary of IAU.

I foresee the next three years not just in my role as General Secretary, but as a shared mission involving each and every one of you as well. I count on your initiative, your passion and your commitment to Astronomy.

To fulfill the ambition expressed in the Strategic Plan I perceive IAU as a solid organisation that encompasses not only all its scientific structures - Divisions, Commissions and Working Groups - but also consolidates on its pillars: the four offices dedicated to the pursuit of Education through Astronomy, the training of future astronomers through ISYA, Astronomy for Development and the Communication of Astronomy to the general public. Three of these Offices have been established through bilateral agreements and are already in operation. To install the fourth office - Astronomy for Education - an international call will soon be launched to identify the IAU partners in this new adventure. The goal is that by the middle of the triennium, the four offices will be fully operational, involved in collaboration with each other, and sharing a similar standing within the organisation.

IAU is approaching 100 years. The organisation grows older pursuing its long-term traditions. But it also grows in size with new members, grows ambitious with bold proposals and rejuvenates by opening up to the younger generation of astronomers.

I have learned from experience that dreams can come true through determination, creativity, and above all, networking. I feel that this endeavour will have to be global,

involving members and structures, together to fulfil the IAU mission. Together, we will advance and excel, bounded by clear principles: transparency, inclusiveness - the many types of inclusiveness - and creativity.

As you see this is really an exciting time! And my ambition is, over the next three years, to use Astronomy and IAU initiatives as an enlightening and binding tool for realisation, all over the world. Together under one sky! I will do my best. And I count on you!

## 6. Dance II

A traditional dance was performed.

## 7. Closing Remarks

*Gerhard Hensler, Chair of the NOC*

Closing remarks were made by the NOC and LOC, with thanks to the organizers and volunteer helpers, who were invited onstage.

## 8. Invitation to the XXXIst General Assembly 2021

*Hyesung Kang, Chair of the National Organizing Committee for the XXXIst General Assembly*

The Korean Astronomical Society would like to welcome you to the IAU XXXI General Assembly, which will be held in Busan, Republic of Korea, in 2021. During the bidding competition in 2015, we set the main theme of the Busan GA as “Astronomy for All,” in a sincere hope to make this event a true festival for astronomers from all around the world. To that end, the KAS pledged a special travel grant, which will complement the traditional IAU travel grant, to encourage more young students and junior postdocs to attend the Busan GA.

Let me take a moment to introduce the host city, Busan, situated on the southeastern coast of the Korean peninsula. It has earned recognition as the best place to visit in Asia in 2018 by Lonely Planet.

You will find beautiful beaches, gentle hills, Buddhist temples, and abundant tourist attractions where contemporary lifestyle meets long-standing history. Though summer days can be warm, you can relish the cool sea breeze at Haeundae Beach.

Our venue, BEXCO, stands out as the most competitive exhibition and convention center in Northeast Asia, boasting a state-of-the-art auditorium, ample meeting rooms, and exhibition space. The area also provides plenty of hotels at affordable prices, convenient shopping centers, and an advanced IT infrastructure, ensuring a comfortable and productive experience for all attendees.

To give you a glimpse of Busan’s rich natural, cultural, and urban heritage, we have prepared two short videos. Notably, the first movie was produced by college students who enthusiastically wished to showcase the beauty of their proud country.

Let us carry this momentum forward and look forward to the “Astronomy for All” festival at the 31st General Assembly in Busan in 2021.



## 9. IAU Flag Handover Ceremony

Two videos welcomed participants to the XXXIst General Assembly to be held in Busan, Republic of Korea. Gerhard Hensler, Taubner and Wallner passed the IAU flag to Hyesung Kang as incoming Chair of the NOC for Busan, and Ewine van Dishoeck as incoming IAU President.

## 10. Dance III

A traditional waltz was performed, and guests were invited to join in onstage and in the audience as the Congress closed in dance.

## 11. Group Photo and Image Archive

Images taken during the General Assembly can be viewed and downloaded from the IAU web site:

[https://www.iau.org/public/images/archive/category/general\\_assembly\\_2018/](https://www.iau.org/public/images/archive/category/general_assembly_2018/)



**Figure 1.** Participants at the XXXth General Assembly, Austria Center, Vienna.  
Credit: IAU/M. Zamani