# IAU Commission 55: Communicating Astronomy with the Public

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## Summary

The International Astronomical Union (IAU) has vested considerable responsibility for its public outreach efforts in Commission 55 (C55), Communicating Astronomy with the Public. This article briefly recounts the origin and history of C55 over the past decade, describing how C55 fits into the IAU's recently revised organisational structure and newly implemented Strategic Plan. It also lists C55's current officers, Organising Committee members, Working Groups, and Working Group chairs and explains how IAU members can join C55, inviting other professionals engaged in astronomy-related public outreach to become associates of C55.

### Introduction

Do you know what the acronym C55 stands for? If you're thinking of Caldwell 55, otherwise known as the Saturn Nebula, number 55 on the list of deep-sky delights popularised by the late Patrick Caldwell-Moore, that's pretty good — you're thinking astronomically. However, it's even better if C55 makes you think of the International Astronomical Union (IAU) Commission 55, Communicating Astronomy with the Public. After all, you're reading the CAP Journal, published under C55's auspices.

Remember the International Year of Astronomy 2009<sup>1</sup>? The IAU relied heavily on C55 to coordinate IYA2009's Cornerstone projects and many other initiatives. Perhaps you attended the CAP 2013 conference<sup>2</sup> in Warsaw, Poland, this past October, or you attended one of the previous CAP conferences in the US, Germany, Greece or China. By now you've guessed correctly that these meetings, too, were organised by C55 members.

Counting from its earliest incarnation, C55 celebrates its 10th anniversary in 2013.

This is a critical year for the IAU, which is implementing a major reorganisation that was motivated, in part, by the recognition that there is a lot more to the profession of astronomy than just research — including, among other things, communicating research to the public. Accordingly, this seems like a good time to take stock of where C55 came from, where it is now, and where it will go in its second decade.

#### Ancient history

C55 has its origins in a conference titled Communicating Astronomy to the Public, held in Washington, DC in the US, in October 2003. This "CAP" meeting was a successor to a more general one, Communicating Astronomy, held in Tenerife, Spain, in February 2002. Both meetings brought together an international group of producers of astronomical information (research scientists), public information officers (communications coordinators and/or spokespersons affiliated with, for example, research institutions, funding agencies and space missions), and mediators (science journalists and popular writers; staffers from museums, planetariums, and national parks; operators of commercial websites focused on astronomy; and science educators).

Following the 2003 conference in Washington, DC, an IAU Working Group was set up to coordinate further work on three outcomes from the meeting: the Washington Charter for Communicating Astronomy with the Public (note the intentional change of preposition, from "to" to "with"), an online repository of astronomy communication resources (now the Virtual Astronomy Multimedia Project, or VAMP<sup>3</sup>), and a series of biennial CAP conferences.

At the 26th IAU General Assembly in Prague, Czech Republic, in August 2006, the Working Group became Commission 55, Communicating Astronomy with the Public, under Division XII, Union-Wide Activities. Members of C55 and attendees at CAP 2005 and CAP 2007 conferences (in Garching, Germany, and Athens, Greece, respectively) took many leadership roles in planning, coordinating, and executing IYA2009.

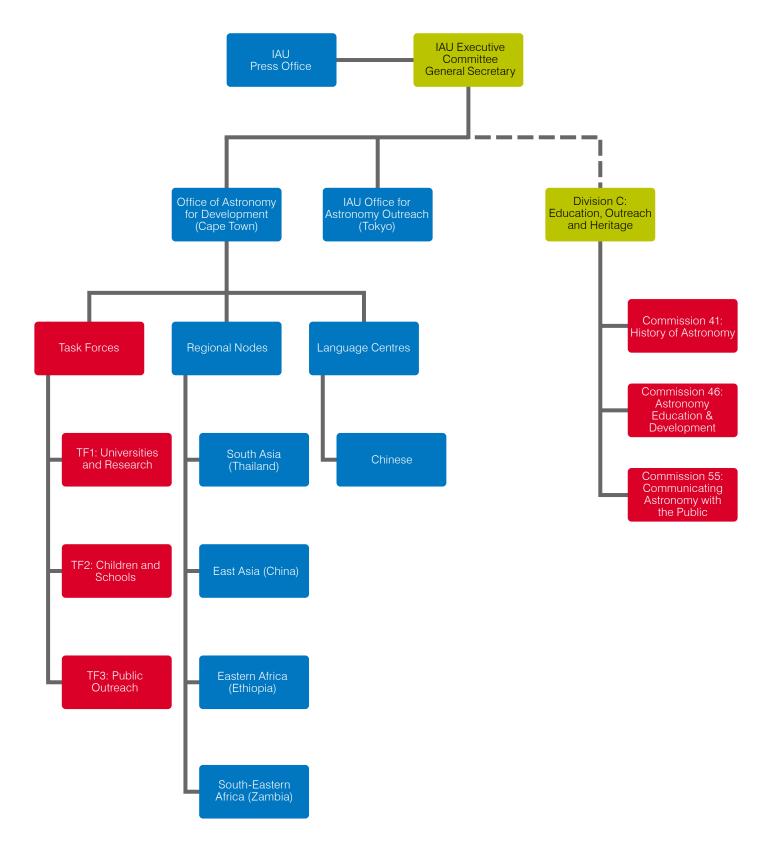


Figure 1. This organisational diagram shows how C55 fits within the IAU's new education and public outreach landscape. It is a simplified overview, which does not show the oversight committees for the OAD and OAO. The entities are connected here by dashed lines to indicate that they have some overlap in personnel and are working together to maximise their effectiveness both individually and collectively. The red colour indicate advisory/think-tank bodies, the blue operational bodies and the green governing bodies. Credit: IAU

## **Recent history**

The enormous impact of IYA2009<sup>4</sup> led the IAU to recognise the importance of not only scientific research but also science outreach, to the health of the profession. To build on the success of IYA2009, the IAU in 2010 adopted a strategic plan that resulted in the establishment of two new institutions: the Office of Astronomy for Development<sup>5</sup> (OAD), based at the South African Astronomical Observatory in Cape Town and led by Kevin Govender, and the Office for Astronomy Outreach (OAO), established at the National Astronomical Observatory of Japan (NAOJ) in Tokyo in 2012 and led by Sarah Reed until the end of May 2013; a replacement has not yet been appointed. The OAD has initiated three task forces to "drive global activities using astronomy as a tool to stimulate development." Task Force 3, Astronomy for the Public, will "drive activities related to communicating astronomy with the public" and is led by chair lan Robson (United Kingdom) and vice-chair Carolina Ödman-Govender (South Africa/European Union). All are active in C55 (Ian Robson was president 2006–2009).

In August 2012, to further align the structure of the IAU with its Strategic Plan and to better match the organisation of the Union with the activities of its national and individual members, attendees at the 28th IAU General Assembly in Beijing, China, approved a sweeping reorganisation that replaced the earlier twelve divisions with nine new ones. C55 now exists within a new division focused on the external relations of the IAU: Division C, Education, Outreach, and Heritage. The president of Division C is Mary Kay Hemenway (US), and the vicepresident is Hakim Malasan (Indonesia).

A significant fraction of the C55 Organising Committee met in Beijing, where C55 organised Special Session 14 (SpS14<sup>6</sup>) titled Communicating Astronomy with the Public for Scientists. During the C55 business meeting, and again during an impromptu gathering a few days later, the members discussed changes in the IAU's organisational and programmatic structure and how these changes might affect C55. Here, we summarise key points and offer ideas about what we are calling "C55 v2.0". For background information and references, see the C55 website at http://www. communicatingastronomy.org.

## IAU Commission 55 v2.0

C55 was originally organised with this rationale: "It is the responsibility of every practicing astronomer to play some role in explaining the interest and value of science to our real employers, the taxpayers of the world."

The following mission statement describes the role we envisioned for C55 in the IAU:



Figure 2. In light of recent changes within the IAU, the future of C55 was a hot topic of discussion during the business meeting at the IAU General Assembly in Beijing, China, in August 2012. Credit: IAU



Figure 3. The official group photograph from the Communicating Astronomy with the Public conference 2013 conference, which was held in Warsaw, Poland. Many members of C55 regularly attend this biennial conference. Credit: IAU

- To encourage and enable a much larger fraction of the astronomical community to take an active role in explaining what we do (and why) to our fellow citizens.
- To act as an international, impartial coordinating entity that furthers the recognition of outreach and public communication, at all levels, in astronomy.
- To encourage international collaboration on outreach and public communication.
- To endorse standards, best practices, and requirements for public communication.

The outcome of our discussions in Beijing is that we feel that C55 still has an important role to play in the IAU. Our rationale and mission remain unchanged, but in light of the new division structure and the establishment of the OAD (especially Task Force 3) and the OAO, we will need to revise our approach to conducting activities in support of that mission.

For example, the original incarnation of C55 focused on developing and implementing specific projects, especially in connection with IYA2009. C55 v2.0 could instead serve as a "think tank" that unites the global astronomy communication community and seeds initiatives to explore new ways to communicate astronomy with the public more effectively. C55 could also further the development and improvement of astronomy communication, at all levels throughout the world, through stimulating, gathering, and exchanging ideas and practices. The IAU website lists more than 230 members of C55, but at the time of writing this article, only a dozen or so have offered their thoughts as to what C55 should strive to accomplish before the next General Assembly and by what means they should do so. Part of the reason for publishing this article is to solicit additional input. After all, C55 should pursue activities favoured by its members and, practically speaking, cannot do otherwise, as we depend heavily on our members' efforts.

## C55 Officers, Organising Committee and Working Groups

In Beijing, the attending members of C55 elected the following officers:

- President: Lars Lindberg Christensen (EU, European Southern Observatory)
- Vice-President: Pedro Russo (NL/EU, Leiden University)
- Secretary: Richard Tresch Fienberg (USA, American Astronomical Society)

In addition to the officers, the following persons were elected to serve on the C55 Organising Committee:

- Kimberly Kowal Arcand (USA, Chandra X-ray Center)
- Carolina Ödman-Govender (South Africa, Vice-chair of OAD Task Force 3) ex officio
- Sarah Reed ex officio

- Ian Robson (UK, Chair of OAD Task Force 3) ex officio
- Kazuhiro Sekiguchi (Japan, NAOJ)
- Pete Wheeler (Australia, International Centre for Radio Astronomy Research)
- Jin Zhu (China, Beijing Planetarium)

Much of the activity of the IAU Commissions is carried out through (and by) working groups. Here is a list of current C55 Working Groups, including their chairs and missions. You can find additional information about each of these Working Groups on the C55 website at http://www.communicating astronomy.org/workinggroups/index.html

- WG Communicating Astronomy with the Public journal (CAPj) Chair: Georgia Bladon (Editor-in-Chief, CAPj) Mission: To publish a peer-reviewed journal for astronomy communicators.
- WG Communicating Astronomy with the Public conferences Chair: Ian Robson

Mission: To regularly convene producers of astronomical information, public information officers, and mediators worldwide for the interchange of ideas and practices.

• WG Washington Charter for Communicating Astronomy with the Public Chair: Dennis Crabtree

Mission: To promote the importance of astronomy outreach and communication by disseminating information about the Washington Charter and to seek endorsements from funding agencies, observatory directors, department heads and deans, and other employers of astronomers.

WG Outreach Professionalization & Accreditation

Chair: Rick Fienberg

Mission: To bring a sense of professionalism and professional respect to the field of astronomy communication, to advocate for our needs as professional communicators, and to serve as a means for information sharing and networking.

 WG Public Outreach Information Management

Chair: Pedro Russo

Mission: To act as a facilitator for gathering the outreach information management community around a common technical framework, to optimise synergy in the community.

• WG New Media

Chair: Pamela Gay

Mission: To nurture a professional astronomy culture that utilises social media to disseminate science effectively.

 WG New Ways of Communicating Astronomy with the Public Chair: Michael West

Mission: To facilitate the sharing of diverse and effective new ways to communicate astronomy with the public, with a focus on creative alternatives to press releases, public lectures, print and broadcast media, and other traditional methods of bringing astronomy to a wide audience. The WG will serve as a clearinghouse and network for the worldwide community of astronomy communicators in order to engage the public by thinking outside the box.

The following Working Group used to be part of Division II, Sun & Heliosphere, but was transferred to Division C and Commission 55 under the IAU's reorganisation:

• WG Communicating Heliophysics Chair: Carine Briand Mission: Promote the outreach activities of the heliophysics community and encourage increased participation in the activities of C55.

#### How to join C55

Toward the end of 2012, with the IAU's reorganisation in place, all current IAU members were asked to choose with which Divisions and Commissions they would like to be affiliated. At the time of writing, 237 expressed their desires to be part of C55. If, as we maintain "it is the responsibility of every practicing astronomer to play some role in explaining the interest and value of science to our real employers, the taxpayers of the world", then we have the potential to have all 10 800 IAU members join C55.

Any additional IAU members interested in joining C55 should contact the Commission's secretary by email at rick. fienberg@aas.org, indicating which C55 WG(s) you'd like to serve on. Upon approval by the relevant WG chair(s), Rick will pass your information along to the IAU Secretariat in Paris."

Here is something that may surprise and perhaps even delight you: new members of C55 do not have to be full IAU members. That is to say, they do not have to be PhD astronomers who apply to their national committee for nomination and get elected at the next triennial General Assembly. If someone has a burning interest in serving on a WG they can instead become Associate Members of the IAU via C55, or, more accurately, associates of IAU C55. This is the status of 1.11.13 but the Associate procedures are being reviewed and may be revised.

Some associates will be astronomers who, for whatever reason, have simply neglected to become IAU members; the rest will be people working in related fields and will be primarily associated with outreach and educational activities — this likely describes many readers of the CAPjournal.

Note that Associate Members do not have the right to vote at IAU General Assemblies, whereas full members do. Furthermore, associate status is not honorary — associates of C55 are expected to be active, for example, by volunteering to serve on one or more Working Groups.

## Conclusion

We are interested in any comments, questions, suggestions, or constructive criticisms of anything in this article. Are you interested in volunteering to serve on any of our Working Groups, or do you have any recommendations for additional Working Groups? Please address your replies to the authors via email. C55 is your organisation — we cannot succeed without you!

### Links

- 1 http://www.astronomy2009.org
- <sup>2</sup> http://www.communicatingastronomy.org/ cap2013/index.html
- <sup>3</sup> http://www.virtualastronomy.org/
- <sup>4</sup> http://www.astronomy2009.org/resources/ brochures/detail/iya2009\_summary/
- 5 http://www.astro4dev.org
- <sup>6</sup> http://www.communicatingastronomy.org/ meetings/iauga2012-sps14/

### **Biographies**

**Richard Tresch Fienberg**, PhD, Secretary of C55, is the American Astronomical Society's Press Officer and Director of Communications. From 1986 to 2008, he served in a variety of editorial and management positions at *Sky & Telescope* magazine, including eight years as Editor-in-Chief. He is a co-creator of the Galileoscope educational telescope kit, a Cornerstone project of the International Year of Astronomy 2009. Rick is an elected Fellow of the American Association for the Advancement of Science (AAAS), and the International Astronomical Union (IAU) has named asteroid 9983 Rickfienberg in his honour.

Lars Lindberg Christensen, President of C55, is a science communication specialist, who is Head of the ESO education and Public Outreach Department (ePOD) in Munich, Germany. He is responsible for public outreach and education for the La Silla-Paranal Observatory, for ESO's part of ALMA and APEX, for the European Extremely Large Telescope, for ESA's part of the Hubble Space Telescope and for the IAU Press Office. Lars has more than 100 publications to his credit, most of them in popular science communication and its theory.

**Pedro Russo**, Vice-President of C55, is the international project manager for the educational programme EU Universe Awareness. He is also Co-Chair of the IAU Office of Astronomy for Development's Task Force 2, Schools and Children. Until 2012, Pedro was Editor-in-Chief of *CAPjournal*, a publication he founded. He was also formerly the global coordinator for the largest celebration of science, the International Year of Astronomy 2009. As a planetary scientist, he worked with the scientific team for the Venus Monitoring Camera on ESA's Venus Express. For more information, please visit http://home.strw.leidenuniv.nl/~russo/cv.html