

FM14 Session 2: Communicating Astronomy in our Changing World

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Abstract. As the IAU heads towards its second century, many changes have simultaneously transformed Astronomy and the human condition world-wide. Amid the amazing recent discoveries of exoplanets, primeval galaxies, and gravitational radiation, the human condition on Earth has become blazingly interconnected, yet beset with ever-increasing problems of over-population, pollution, and never-ending wars. Fossil-fueled global climate change has begun to yield perilous consequences. And the displacement of people from war-torn nations has reached levels not seen since World War II.

Keywords. astronomy outreach, astronomy education, astronomy for development

1. Summary

In this session on “Communicating Astronomy in our Changing World,” we endeavored to reconcile the latest challenges in astronomy communication and addressed the role of astronomy outreach within the new social context. We began with a brief invited talk by Oana Sandu of the European Southern Observatory on “Conclusions from the Communicating Astronomy with the Public Conference” that occurred in Japan this past March. We then held a panel discussion on “Effectively Navigating the Media Landscape” featuring Lars Lindberg Christensen from the European Southern Observatory, Rick Fienberg from the American Astronomical Society, and Thiago Goncalves from the Federal University of Rio de Janeiro. The panel discussion was followed by an invited talk on “Effectively Coordinating Museums and Planetariums Worldwide” by Mark SubbaRao from the Adler Planetarium. His talk was followed by another panel discussion on “Supporting the Underserved and Dispossessed” that featured Mike Simmons from Astronomers without Borders, Robert Massey of the Royal Astronomical Society, and Ramasamy Venugopal from the IAU Office of Astronomy for Development. Olayinka Fagbemiro from Astronomers without Borders and the Universe Awareness program in Nigeria was unable to make the focus meeting, and so Sze-leung Cheung gave a brief summary of her important work with Nigerian children. We ended this session with a brief invited talk on “Astronomy and Host Communities” – Considerations of Science,

Culture, Environment and Relationships with Host Communities" by Gordon Squires of the Thirty Meter Telescope project.

2. Supplementary materials

The poster presentations of section 2 can be found online in the format of supplementary materials

- Canas, L. *et al.* Communicating Astronomy with the Public 2018: Efforts on Bringing Together the International Astronomy Communication Community. Supplementary material 2-01.
- Cenadelli, D. *et al.* Light, Water, Life: The Search For New Worlds In The Galaxy. An educational project at Regional level in Italy. Supplementary material 2-02.
- Gelderman, R. Interactive Planetarium Presentations that Support a Personal Understanding of the Cosmos. Supplementary material 2-03.
- Hayashi, S. Bridging the Gap of How One Feels about Large Facilities. Supplementary material 2-04.
- Lubowich, D. Methods to increase the audiences, promote citizen science projects, and include women/underserved groups. Supplementary material 2-05.
- Madura, T. *et al.* Astronomy for Students with Visual Impairments: Development of a Hands-on Career Exploration Lab. Supplementary material 2-06.
- Massey, R. ARAS200: Sky & Earth: Engaging diverse partners and diverse audiences with astronomy: a new approach to public engagement. Supplementary material 2-07.
- Radajewski, B. *et al.* Astronomium TV series as an example of cooperation between astronomers and the media. Supplementary material 2-08.
- Ros, R. *et al.* NASE and Cultural Astronomy: the rescue of the "every day" Astronomy. Supplementary material 2-09.
- Sánchez, Y. *et al.* Astronomy as a tool for inclusion of blind and visually-impaired students at university. Supplementary material 2-10.
- Sekhar, A. Challenges with Gender, Immigration and Diversity for Astronomers from Developing Countries. Supplementary material 2-11.
- Sundin, M. *et al.* Two studies using space sports in education and outreach - Sailing on Titan and Equestrian Sports on Mars. Supplementary material 2-12.
- Tomita, A. The 3D map astro/geo tour with your fingertips. Supplementary material 2-13.
- Wadadekar, Y. Learnings from multilingual astronomy outreach in eight Indian states. Supplementary material 2-14.