

COMMISSION C3

HISTORY OF ASTRONOMY

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COMMISSION C3 WORKING GROUPS

Inter-Commission C1-C3-C4 WG

**Archaeoastronomy and
Astronomy in Culture**

Inter-Commission C1-C3-C4 WG

**Ethnoastronomy and
Intangible Heritage**

**Inter-Union (URSI), Inter-Commission
B4-C3 Functional WG**

Historical Radio Astronomy

Inter-Union IUHPST/ICHA–C3

**IUHPST Commission for
History of Astronomy**

ANNUAL REPORT 2021–2022

1. Introduction

IAU Commission C3 (History of Astronomy) started in 2015 as a natural continuation of the previous IAU Commission 41 for History of Astronomy, which was established in 1948 and which was very successful in supporting research on the history of astronomy. Commission 41 organized and sponsored workshops and conferences, promoted research collaborations, formed specialist Working Groups and fostered the publication of members' research in the History of Astronomy.

2. The International Union of History and Philosophy of Science and Technology

IAU Commission C3 is also the primary constituent and coordinating arm of the Inter-Union Commission for History of Astronomy (ICHA), which is based in the International Union of History and Philosophy of Science and Technology (IUHPST).

3. Activities of Commission C3 during the first year of this triennium

3.1. *Conferences and Workshops*

No face-to-face meetings have been possible in 2021 due to the Covid-19 pandemic. Other international conferences and workshops scheduled in 2021 that involved C3 either were postponed or were cancelled.

3.2. *ICHA (represented by IAU-C3) and CHAMA Symposium*

ICHA and IAU-C3 organized a successful Symposium during the *26th International Congress of History of Science and Technology* in July 2021. The theme of this Symposium “*Art, image, and astronomical knowledge*” was proposed by Christiaan Sterken and was endorsed by the Organizing Committee of C3. The programme of the Symposium was developed by Sara Schechner (President of ICHA) together with Yunli Shi (President of the Commission on the History of Ancient and Medieval Astronomy – CHAMA). The meeting addressed the question whether stand-alone images found in art can possibly serve as reliable and quantifiable evidence for explicating past observations of natural phenomena such as sunspots, solar eclipses, aurorae, comets, constellations, and crucial aspects of the Earth’s past climate. Twenty speakers compared knowledge acquired by images (paintings, rock art) with knowledge acquired by words (descriptions, reports), by empirical methods (experiment, measurement, observation) and by formulas (theory, computer models).

3.3. *IAU General Assembly 2022, Busan (Korea)*

Commission C3 supports the Division C Days at Busan (Korea) during the IAU General Assembly 2022. A two-day in-person plus remote meeting will handle the following themes:

- (a) Day 1: Beyond the pandemic: a discussion of lessons learned and new opportunities in Astronomy Education and Outreach in the post-Covid era
- (b) Day 2: Respecting astronomy history and heritage: a discussion on the intersection of culture, science and social movements.

4. C3 Working Groups

Working Groups were a key factor in the success of C3 and its predecessor C41 for more than two decades (see Orchiston, 2019). The Division C Steering Committee agreed to the formation of three C3 WGs, all of which are Inter-Commission WGs. The three C3 WGs (on *Archaeoastronomy and Astronomy in Culture*, chaired by Steve Gullberg; *Ethnoastronomy and Intangible Heritage*, chaired by Duane Hamacher; and *Historical Radio Astronomy*, chaired by Richard Schlizzi) were successful in fostering research and publications, organizing meetings, and maintaining up-to-date lists of publications in their respective fields since the XXXth IAU GA. Each Working Group submits its own short Annual Report to the IAU.

5. Project Groups

Commission C3 organized informal *Project Groups* in order to facilitate research projects and international collaborations at Commission level: *Asian Astronomy*, chaired by Wayne Orchiston; *Biographical Encyclopedia of Astronomers*, Third Edition, chaired by Thomas

Hockey and Jennifer Bartlett; *Historical Instruments, Archives, and Observatories*; chaired by Sara Schechner; *Indian and Southeast Asian Stone Inscriptions*, chaired by B.S. Shylaja; and *Johannes Kepler*, chaired by Terry Mahony. Progress reports for each of these Project Groups are published in the *Journal of Astronomical History and Heritage*.

6. Outreach

Though Outreach is not explicitly mentioned as a Commission C3 task, we have supplied indirect support for IAU Office for Astronomy Outreach by providing answers to general questions from the public at large. Two interesting questions were relayed to C3, viz.,

(a) passed on by Assistant General Secretary Diana Mary Worrall: “Dear IAU, . . . I am 11 years old. I am writing to protest for Noctua to be put back in the sky as an important constellation. After learning that she was taken out of the sky in my Luna Learners astronomy class [www.lunaschoolofwitchcraftandwizardry.com/post/welcome], I wanted to contact you to ask for her to be placed back in the sky. As she was discovered in 1822 and then taken out of the sky in 1922, I think it would be perfect timing to put her back in the sky in 2022! Don't you agree? Plus, There is a wolf constellation in the sky. Shouldn't there be an owl constellation to guide the wolf? I think that a playful wolf should have a wise owl to guide him.”

(b) passed on by Kelly Blumenthal, IAU Office for Astronomy Outreach: “If I were a staff astronomer at an observatory in January 1900, and my supervisor ordered me to calculate the solstice times to the minute for June and December of 1900, without access to any previous year solstice times, how would I go about doing that?”

Both questions were dealt with by Christiaan Sterken.

7. Grants

The IUHPST has provided some funding that the Organizing Committee of Commission C3 can distribute to early-career scholars to defray the costs of attending meetings relevant to the history of astronomy. Four grants covering the early-bird registration fee were bestowed to participants of the 26th IUHPST International Congress, and one grant was allotted to a PhD student to participate at the *Astronomical Observatories and Chronometry: Time, Science and Instruments (18th–20th Century)*, La Chaux-de-Fonds, Switzerland, December 2021.

References

- Orchiston, W., 2019. “The IAU C41 Working Groups and their contribution to international history of astronomy research.” In Sterken, C., Hearnshaw, J.B., and Valls-Gabaud, D. (eds.), *Under One Sky: The IAU Centenary Symposium*. (Cambridge: Cambridge University Press). Pp. 357–380.
- Sterken, C., Hearnshaw, J., and Valls-Gabaud, D. eds., 2019. *Under One Sky: the IAU Centenary Symposium*, IAU Symposium 349 (Cambridge: Cambridge University Press).