Commission C.C4 World Heritage & Astronomy – Annual Report 2019

https://www.iau.org/science/scientific_bodies/commissions/C4/

Gudrun Wolfschmidt, President of C.C4

PRESIDENT	Gudrun Wolfschmidt
VICE-PRESIDENT	Juan Antonio Belmonte Aviles
PAST PRESIDENT	Clive Ruggles
ORGANIZING COMMITTEE	Roger Ferlet, Siramas Komonjinda,
	Ioannis Liritzis, Areg M. Mickaelian

DIVISION C / COMMISSION C4 WORKING GROUPS

Commission C.C4 WG1	Astronomical Heritage in Danger
	Alejandro López, Argentina (Chair)
Commission C.C4 WG2	Windows to the Universe:
	Classical and Modern Observatories
	Matthias Hünsch, Germany (Chair)
Commission C.C3.C4.C1 WGAAC	Archaeoastronomy and
	Astronomy in Culture
	(Joint with Commission C3 and C1)
	Steven Gullberg, USA (Chair)
Commission C.C4.C3.C1 WG	Ethnoastronomy and
	Intangible Astronomical Heritage
	(Joint with Commissions C3 and C1)
	Duane W. Hamacher, Australia (Chair)

There were six major topics and some more activities:

1. Creation of WGs of Division C, Commission C4

Until end of April 2019 the continuation or new creation of the WGs of Division C was discussed. The following WGs were approved: C4 WG2 "Windows to the Universe: Classical and Modern Observatories", C4 WG4 "Astronomical Heritage in Danger", and the Inter-Commission WGs: C3-C4-C1 WG "Archaeoastronomy and Astronomy in Culture" (WGAAC), C4-C3-C1 WG1 Ethnoastronomy and Intangible Astronomical Heritage". The C4 WG3 "Heritage of Space Exploration" was not approved by Div. C.

2. Proposal: FM at the IAU GA, Busan, Korea

In summer 2019, we (Wayne, Gudrun and the SOC with C4 organizing committee members) started the discussion about our proposal for a Focus Meeting at the IAU General Assembly, Busan, Korea, August 2021 – Title: "Progressing the UNESCO-IAU History and Heritage Initiative: Emphasis on Asia",

Co-ordinating Division: C, Hosting Commissions:

C3 (History of Astronomy) and C4 (World Heritage & Astronomy).

Scientific Organising Committee:

- Professor Dr. Gudrun Wolfschmidt (Hamburg University Observatory, Germany, C4 President Co-Chair).
- Professor Dr. Wayne Orchiston (National Astronomical Research Institute of Thailand, C3 President – Co-Chair)

The proposal was delivered on 14 December 2019 with Letters of Intent and is not yet approved by the IAU.

3. Historical, Cultural and Scientific Heritage of Astronomical Observatories

In December 1–6, 2019, two C4 organizing committee members were invited by Kazan Federal University and the Academy of Sciences of the Republic of Tatarstan, Russia. My lecture had the topic: Heritage of Astronomical Observatories in the context of the Thematic Initiative on Heritage of "Astronomy, Science and Technology" and Areg Mickaelian's lecture: Byurakan Astrophysical Observatory as the centre of Scientific and Cultural Heritage; in addition I was asked to participate in the Round Table discussion during the International Scientific and Practical Conference: "Historical, Cultural and Scientific Heritage of Astronomical Observatories: Formation of the World Universal Value of Sites"

(https://forumrt.ru/en/).

Concerning the two Kazan observatories (old observatory, 1837, and new Engelhardt Astronomical Observatory (EAO), 1901), I had to give advice to Kazan authorities how to prepare an application for the Unesco World Heritage List. The proceedings of the conference will be published hopefully in 2020.

4. "Astronomies, Cultures and Societies"

For the Oxford XII and SIAC VIII Conference "Astronomies, Cultures and Societies" (http://dawson.fcaglp.unlp.edu.ar/) in La Plata, Argentinia, April 16–25, 2020, some C4 members are also members of the SOC (Juan, Wayne, Clive, Alejandro, Duane, Siramas and Gudrun), and we had to evaluate the abstract applications. The title of my lecture is "Cultural Heritage of Observatories – Changing Structures over Time". But now due to the Corona Virus situation the conference was shifted to March 2021.

5. IAU List "Outstanding Astronomical Heritage" (OAH)

For the IAU list "Outstanding Astronomical Heritage" (OAH), astronomical heritage sites were compiled that are outstanding in the history of astronomy but do

not necessarily demonstrate potential *Outstanding Universal Value* which would be needed for inscription on the *World Heritage List*, because the actual building may be damaged or destroyed and the original instruments may no longer exist in situ or at all. During 2019, I added more observatories, especially Middle and South America,

(https://www3.astronomicalheritage.net/index.php/heritage/outstanding-astronomical-heritage).

6. Nominations and Inscriptions on the World Heritage List in 2019

In the annual meeting celebrated in Baku (Azerbaijan) in July 2019, the World Heritage Convention (WHC) of UNESCO declared two sites as World Heritage:

• Spain: Risco Caído and the Sacred Mountains of Gran Canaria Cultural Landscape

The land- and skyscape interaction in the different components of the property was a must for the success of the candidacy. C.C4 past President, Clive Ruggles, and present Vice-President Juan Antonio Belmonte were deeply involved in the whole process as main scientific advisors of the proposal and co-authors of the corresponding rpoceedings. This is a great success of the IAU-UNESCO Astronomy and Wolrd Heritage Initiative, which was at the basis of the creation of C.C4.

(http://whc.unesco.org/en/list/1578);

- United Kingdom: Jodrell Bank Observatory
 In that same meeting, UNESCO also declared the Observatory of Jodrell
 Bank as a World Heritage site. Again Prof. Dr. Clive Ruggles was a key
 member of the team behind the proposal. Jodrell Bank is a very impressive
 site with the Lovell and Mark II Telescopes as landmarks; it is the earliest
 radio astronomy observatory in the world that is still in existence.
 (http://whc.unesco.org/en/list/1594).
- Peru: Chankillo pre-Classic archaeological astronomical complex

 The impressive pre-Classic archaeological site of Chankillo, in Peru, on occasions referred as the first observatory of the Americas, has been proposed in 2019 as a candidate to be declared as a World Heritage site. Profs. Ivan Ghezzi and Clive Ruggles were the key factors in the process. In september 2019, the proposed property was evaluated on site by an ICOMOS specialist and it is currently in the process of final evaluation by UNESCO advisory boards. Unfortunately, the WHC meeting to be held in China has been postponed "sine die" due to the Covid-19 crisis.

 (http://whc.unesco.org/en/tentativelists/5792/).
- Spain: Talayotic Culture of Minorca will be the Spanish candidate for WHC in 2021 Spanish authorities have decided that Tlayotic Minorca Serial Proposal as a World Heritage site will be the candidate of Spain for the World Heritage

Convention in 2021. C.C4 Vice-President Juan Antonio Belmonte is in charge of the coordination of the cultural astronomy aspects of the proposal based, among other, on the pioneering work of Prof. Michael Hoskin in the 1980s and 1990s. Currently the white book of the proposal is being documented and written.

(https://whc.unesco.org/en/tentativelists/3433/).

7. Presentations and Conferences

- In 2019 I organised in Hamburg Observatory eight events in the context with the jubilee of the IAU 100 years (https://www.hs.uni-hamburg.de/DE/GNT/fhs/fhs-v19.php).
- During the flagship event "International Astronomical Union (IAU) 1919–2019: 100 Years Under One Sky", April 10–16, 2019, in Bruxelles, Belgium, I could visit the very interesting old Royal Observatory of Belgium building (1826–1891) and the Uccle Observatory (1883–1890) in Bruxelles.
- During the XXXVII Scientific Instrument Symposium (SIC), Sept. 23–27, 2019, with the topic "Instruments at crossroads" I could study the observatories and instruments in Havana, Cuba: the Jesuit geomagnetic, meteorological and astronomical observatory in Belém college (1857, now museum), the National Observatory, (1908, since 1965 Cuban Institute of Meteorology), and the Astronomical Observatory of the University of Havana (1914). These will be included in the OAH List.

Conclusion and Future Plans

In the next year, a key activity will be to progress the IAU's List of *Outstanding Astronomical Heritage* sites, which will serve along sites that are recognised on the *World Heritage List* as a "gold standard" level of international recognition. The Commission C4 and its members will also continue to work directly with State Parties to help progress particular nomination projects. We hope to get more nominations and inscriptions on the World Heritage List. In addition, the WG4 "Astronomical Heritage in Danger" will make a list of sites with relevant astronomical value for humanity that are currently at risk. We – all WGs – also want to achieve greater visibility within the community of professional and amateur astronomers and the public – in cooperation with Commission C1 "Astronomy Education and Development".

Gudrun Wolfschmidt President of C.C4

April 15, 2020