## Report of IAU Division C Working Group on Star Names (WGSN)

## Report for the period January 2017 through December 2017

Eric Mamajek (chair, USA)

WG Members: Beatriz García (Argentina), Duane Hamacher (Australia), Thierry Montmerle (France), Jay Pasachoff (USA), Ian Ridpath (UK), Xiaochun Sun (China), Robert van Gent (Netherlands). WG Associate: Yunli Shi (China).

The WGSN's Terms of Reference and membership are provided at the IAU website: <a href="https://www.iau.org/science/scientific\_bodies/working\_groups/280/">https://www.iau.org/science/scientific\_bodies/working\_groups/280/</a>. WGSN's primary goals are to catalog and standardize proper names for stars for the international astronomical community, drawing upon the extensive historical and world-wide cultural astronomy literature. The WGSN primary activities during 2017 included:

- 1. WGSN continued to research and record historical and cultural star names from the astronomical literature and cultural astronomy literature. The WG maintains a large working database of names with stellar cross-IDs, and bibliographic references. WGSN also selects individual names with standardized spellings for association with individual stars (voted upon by WGSN members), and maintains this list of unique names in the IAU Catalogue of Star Names (CSN) at the IAU website https://www.iau.org/public/themes/naming\_stars/.
- 2. During 2017, WGSN reviewed and approved 86 new IAU star names, including ones with Australian Aboriginal, Chinese, Coptic, Hindu, Mayan, Polynesian, and South African etymologies. The approval of the new star names was summarized in a December 6, 2017 IAU press release (https://www.iau.org/news/pressreleases/detail/iau1707/). The 86 names were approved in votes 1 February (13 names), 30 June (29 names), 5 September (41 names) and 19 November 2017 (3 names). Several other proposed names did not garner sufficient votes for a majority (or were tabled for further study) and were not approved. All of the approved names are traceable to names for individual stars in published astronomy works (i.e. none are "new").
- WGSN carefully vetted all stellar designations for named stars and assigned appropriate Washington Double Star (WDS) identifiers for components for multiple systems (in consultation with Brian Mason of IAU Comm. G1).
- 4. Questions about Chinese star names and spellings were addressed to the China, Nanjing IAU National Committee. Prof. Yunli Shi was recommended as an expert on Chinese astronomical history, and he agreed to serve as an associate

member of WGSN. Subsequently, the following WGSN policies for Chinese star names were adopted: 1) Pinyin transliterations are standard, 2) proposed individual names for the IAU catalogue should preferably be names used for single stars, not asterisms, as this would cause confusion, 3) star names and cross-identifications from Sun X. & J. Kistemaker's 1997 book "*The Chinese Sky During the Han: Constellating Stars and Society*" are considered standard for early Chinese star names. A total of 11 Chinese names were voted into the IAU Catalogue of Star Names in 2017.

5. The WGSN regularly responded to inquiries about celestial nomenclature from the IAU EC, IAU astronomers, and the public.

Eric Mamajek, Chair Pasadena, CA, USA 15 December 2017