IAU Commission A3 - Fundamental Standards Annual Report 2021

Susan G. Stewart, Jose M. Ferrándiz, Steven A. Bell, Agnès Fienga, Demetrios N. Matsakis, Wendy K. Puatua, Antonia J. Wilmot

IAU Division A Commission A3 (CA3) strives to fill an important and necessary role in the IAU and wider astronomical research community by identifying, coordinating, researching and communicating fundamental astronomical standards. The Commission is entering its third triennium and currently has 101 members. In 2021, four new members joined the CA3 Organizing committee. The primary mission of the CA3 Organizing Committee is to:

- 1) Identify emerging standards
- 2) Coordinate the investigation and implications of emerging standards
- 3) Gather feedback from standards organizations, A3 members and the astronomical community
- 4) Communicate recommended and IAU-endorsed standards

These primary goals of CA3 are achieved by maintaining two lines of communication. As such, both incoming and outgoing communication are of great importance to the success of CA3. The Commission seeks to keep strong ties and enhance communication with our standards partner organizations: Global Geodetic Observing System Bureau of Products and Standards (GGOS BPS), Consultative Committee on Time and Frequency (CCTF), Consultative Committee for Units (CCU) and International Earth Rotation and Reference Systems Service (IERS). We also seek strong coordination with IAU standards partners: Standards of Fundamental Astronomy (SOFA) and the Working Group on Cartographic Coordinates and Rotational Elements (WGCCRE). We have improved the outgoing communication the past two years through the development of and updates to the CA3 website: <u>https://iau-a3.gitlab.io/</u> (Susan Stewart, webmaster). In this effort, CA3 has now taken over the responsibility for the future upkeep of the end product of the Numerical Standards for Fundamental Astronomy (NSFA) Working Group which dissolved at the conclusion of the last triennium. Past President of CA3 James Hilton wrote the final triennial report for the NSFA WG this past year and it is posted on the CA3 website. Commission leadership participated in the virtual GA business meeting in August and communicated with members regarding support for resolutions in relation to the importance of fundamental standards.

Commission A3 is currently organizing for the hybrid General Assembly in August 2022. Preparations have revolved around reaching out to standards organizations and discussions concerning the agenda of the CA3 business meeting and presentation at the Division Days. Recently we have organized our committee discussion topics which include consideration of virtual workshop, a social media account to elevate CA3 communication of standards, and evaluating our list of emerging standards. We have asked the IAU Communications committee their opinion of the social media platform and other ideas for broader communication.