IAU Working Group - Numerical Standards for Fundamental Astronomy

Brian Luzum – Chair

2016 Annual Report

Following the meeting at the 2015 IAU General Assembly, several topics for discussion during the next triennium were proposed. These include: the “defining” constant au be moved to the “other” constants; the “other” constant $L_C$ be eliminated; the NSFA Current Best Estimate value for the “measurable” constant $G$ always point to the CODATA value for $G$; the NSFA Current Best Estimate for the “body” constant $GM_E$ point to the latest geophysical value for $GM_E$; the NSFA Current Best Estimate for “body” constants $J_2$ and $W_0$ point to the latest geophysical values for $J_2$ and $W_0$, issuing NSFA Reports with the latest values instead of proposing IAU Resolutions; and that the NSFA WG should consider the possibility of disbanding after the 2018 IAU General Assembly.

The WG created a joint poster with the Standards Of Fundamental Astronomy (SOFA) and Cartographic Coordinates and Rotational Elements (CCRE) promoting “standards”. The poster was presented at the “Understanding the Earth core and nutation” Workshop at the Royal Observatory of Belgium in September, 2016.

In addition, the Chair of the NSFA Working Group provided a letter of support for the proposed IAU Symposium on “Reference Systems and Frames”, which if approved, would be held during the IAU 2018 General Assembly.