Opportunity to chair the IAU Time Domain Working Group

Please send nominations or suggestions to the current WG chair, Rob Seaman of the University of Arizona (<u>rseaman@arizona.edu</u>). Membership in the IAU is required (or in process).¹

The IAU Working Group on Time Domain Astronomy (https://iau.org/science/scientific_bodies/working_groups/260/) reports to Division B (Facilities, Technologies, and Data Science) with a cross-disciplinary mission. It was formed during the 2015 triennium as a response to many trends of multi-messenger, rapid response astronomy, but its remit extends to the study of all kinds of variability - transient, periodic, secular, or aperiodic - across all disciplines of astronomy from the solar system to cosmological distances. Activities of the working group have included support for the latest three editions of the Hot-wiring the Transient Universe workshops (2016, 2019, and 2024, see below), and organizing IAU Symposium 339, Southern Horizons in Time Domain Astronomy², in Cape Town, South Africa in 2017. IAUS 339 was a follow-on to the earlier IAUS 285, New Horizons in Time Domain Astronomy³, held in the United Kingdom in 2011.

It is customary for the working group chairs and co-chairs to rotate off each triennium. This is overdue because of the impact of COVID-19 on the previous General Assembly. The process will be self-run by the Time Domain WG with details remaining to be settled. With 100+ members, our WG also has an unofficial organizing committee, and there will likely be multiple slots available.

Hot-wiring the Transient Universe as an activity of the IAU Time Domain WG

The first Hot-wiring the Transient Universe workshop was held at the University of Arizona in Tucson, June 4-7, 2007. The proceedings were published as a special issue of Astronomiche Nachrichten (https://onlinelibrary.wiley.com/doi/epdf/10.1002/asna.200890001). As described in the Editors' note, the workshop was originally a joint effort of the Virtual Observatory (IVOA) and the Heterogeneous Telescope Networks Consortium (HTN). The latter no longer exists, or rather, the telescopes still exist, and the infrastructure for networking them together has evolved dramatically. The IVOA was influential in the early evolution of transient alert formats. See the proceedings of Hotwired II, held at UC Santa Cruz, April 2009 (http://hanksville.org/hotwired2/book/chapters/HTUbook_USletter.pdf)⁴ for historical details of how all these threads began to tie together. Workshops have continued periodically:

- III. Santa Fe (2013) https://www.slac.stanford.edu/econf/C131113.1/
- IV. Santa Barbara (2015) <u>https://lco.global/workshops/hotwired-vi/</u>
- V. Philadelphia (2016) <u>http://hotwired5.villanova.edu</u>
- VI. Evanston (2019) https://sites.northwestern.edu/hotwired6/
- VII. Toronto (2024) https://www.dunlap.utoronto.ca/hotwired7/

The Hotwired workshops have benefited from the support of individual university departments volunteering to host self-funded workshops. This will continue, but the IAU provides a possible funding model should organizers seek an off-campus venue to reach underserved communities.

¹ Membership qualifications vary by country: <u>https://www.iau.org/administration/membership/individual/qualification/</u>

² https://www.cambridge.org/us/universitypress/subjects/physics/observational-astronomy-techniques-and-instrumentation/southernhorizons-time-domain-astronomy-iau-s339

³ https://www.cambridge.org/us/universitypress/subjects/physics/observational-astronomy-techniques-and-instrumentation/newhorizons-time-domain-astronomy-iau-s285

⁴ Paperback: https://www.lulu.com/shop/rob-seaman-and-roy-williams-and-sarah-emery-bunn/hotwiring-the-transient-universe