Annual report 2019/2020 – IAU Working Group on Supernovae
Co-chairs: Gal-Yam; Mazzali; Smartt

The SN WG continues to work according to its work plan. Several activities have been advancing in parallel:

The Transient Name Server (TNS; https://wis-tns.weizmann.ac.il/), the official IAU instrument for report, distribution, and name assignment to astronomical transients, has now been fully adopted by the community. Reported transient numbers continue to rapidly rise (see: https://wis-tns.weizmann.ac.il/stats-maps/reports-timeline) from 500 reports/day when the service was launched to >3000 reports per day in recent months. Development of this infrastructure continues following community needs, including the following recent additions:

- Handling of archiving, reporting and name designation for Fast Radio Bursts (FRBs).
- Launch and wide use of the new AstroNotes utility for reports of interest to the community.
- We are working with other large initiatives to integrate TNS services with other activities to benefit the community, including services like Treasure Map (https://arxiv.org/abs/2001.00588) and the NSF funded SCIMMA (Scaleable Cyberinfrastructure for Multimessenger Astronomy).

We continue to work to improve online supernova data archives, including support and development of the WISeREP archive (https://wiserep.weizmann.ac.il), which now includes online analysis tools.

We held two community meetings as part of the recent main astrophysics conferences, the 2019 Winter AAS meeting in Seattle and the Spring EWASS meeting in Lyon, to discuss further activities and get input from the community.

The WG leadership (co-chairs Gal-Yam, Mazzali and Smartt) recently met in person (January 2020) at the Weizmann Institute to formalize future activities. The main items for the coming year are:

- Introducing a new policy (fair use license) for data made public on our platforms (in addition to standard public and private uploads).
- Studying preparedness to the next Galactic supernova
- Handling of additional transient classes (TDEs, extragalactic novae, GRBs, GWs).
- Supporting photometric classification of transients, in preparation for LSST.
- Working with journals to make sure all published observations are made accessible through data archives.

We expect to request a continuation of this WG beyond 2021.