

## **A Memorandum of Understanding (MoU) between:**

The ZTF consortium, as represented by the “Physics of SNe” working group of the Zwicky Transient Facility (ZTF-SN); Avishay Gal-Yam (WIS) will serve as a point of contact (POC) for the purpose of this MOU.

and

Dr. Yi Yang and his team, including core members Baade (ESO), Cikota (ESO), Hoflich (Florida state), Maund (Sheffield), Patat (ESO), Spyromilio (ESO), Stevance (Sheffield), Wang (TAMU) and Wheeler (UT), and possibly their students and postdocs.

*Objective:* The ZTF-SN and Yang teams will form a collaboration aimed at collecting spectro-polarimetry observations of young ZTF targets using the VLT in order to measure their polarization signal and its time dependence, as well as imaging polarimetry observations using the Liverpool telescope (LT).

### *Contributions:*

ZTF-SN: The ZTF-SN working group will provide, **on a non-exclusive basis**, transients discovered by the Palomar 48 inch Oschin Schmidt telescope within the ZTF partnership proprietary data to the Yang team. These will be **classified supernovae** (SNe) of types that are not SNe Ia and that are deemed as promising targets for spectro/polarimetric study. This includes all information necessary for such observations (coordinates, magnitudes, finder charts, contextual information, and/or ongoing attempts for classification with other facilities). The rate of suitable candidates requiring such observations is currently estimated to be 1-2 per month.

Yang team: The Yang team will propose for, obtain and reduce VLT and LT spectro/polarimetric observations of as many of those among the candidates that the parties agree are best match to the observational capabilities and interest at the time. Target choice will be announced to the entire ZTF-SN WG by the POC via telecon and other digital means (Wiki, Marshal etc). The Yang team will make available reduced imaging/spectral sequences to the ZTF-SN working group (and, if appropriate, to other ZTF working groups) in a timely manner.

### *Data Rights and Benefits:*

The Yang team will have a right to lead publications on objects where the polarimetry signal scientifically merits standalone papers. Such papers can be either single-object comprehensive papers that include additional observations, or polarization-specific papers that will be published in parallel with other papers on the same object published by other ZTF members. The initiation of such papers will be announced to the ZTF partnership using the standard channels monitoring new papers (ZTF-SN WG, publication board). In cases where the polarization data does not merit standalone papers, the Yang team will contribute its data to ZTF papers led by other groups.

The Yang team may obtain unlimited follow-up of such sources with their own resources after approval by the ZTF-SN coordinator. The ZTF-SN working group will further contribute P48 survey photometry, P60 SEDM spectra, and any additional follow-up it decides to share to further maximize the impact of such efforts. ZTF co-authorship on these publications will be determined by the ZTF publication policy.

For all other publications resulting from this collaboration, the ZTF-SN working group will lead the paper and publications including data obtained by the Yang team will invite at least 3 team members as co-authors. Additional co-authors will be added only in special cases that are specifically justified and approved by the ZTF-SN WG.

*Duration:*

This agreement covers the period from 1 January through 31 December 2018. It can be renewed annually by mutual agreement by both parties.