

This memo serves as A *Memorandum of Understanding (MoU)* between

The ZTF consortium, as represented by the “AGN and TDE science working group” of the Zwicky Transient Facility (ZTF); Sjoert van Velzen (NYU/UMd) will serve as a point of contact (POC) for the purpose of this MOU.

and

Dr. Tiara Hung and her team at UC Santa Cruz (UCSC), including Prof. Ryan Foley, Dr. Georgios Dimitriadis, Dr. Charles Kilpatrick, and Mr. Cesar Rojas-Bravo (grad student).

Objective: The ZTF AGN and TDE working group (ZTFBH) and T. Hung’s group have been actively obtaining follow-up spectroscopy of TDEs discovered by ZTF. Now follow-up observations have been completed for a sample of ~15 TDEs, T. Hung will lead the spectroscopic analysis of this TDE sample. T. Hung will continue collaborating with ZTFBH to discover and coordinate follow-up observations to map the spectral diversity of TDEs.

Proposed contribution: T. Hung and team members at UCSC will use the SOAR, Lick, Keck telescopes under PI Foley’s transient follow-up programs to acquire classification and follow-up spectra of TDEs brighter than 19.5 mag selected by ZTFBH while not compromising PI’s primary scientific goals. T. Hung and her group will be responsible for reducing these spectra and make them available to ZTFBH in a timely fashion. T. Hung has been awarded Gemini, LCO, and HST time for TDE follow-up observations and will continue proposing for observing time in upcoming cycles. T. Hung will also continue to scan the ZTF TDE candidates.

ZTF contribution: ZTFBH will provide the coordinates and photometry of TDE candidates from both the public and partnership alert streams and share their spectroscopic classification. In some cases, this include SED Machine classification of TDE candidates obtained by other ZTF programs. These information (coordinates, photometry, and classification with ZTF collaboration resources) will not be shared with anyone outside of the team.

Proposed Publications: T. Hung has started analyzing the spectroscopic data of ZTF TDEs and will be responsible for organizing the results into a paper in the proposed duration. This paper will make use of the results of photometric analysis of ZTF P48 data that Dr. van Velzen is leading. Any ZTF member who has contributed to the spectra used in this paper will be invited to be a co-author.

Papers on individual TDEs may be led by ZTF members or by T. Hung depending on the focus of the paper. In cases where the optical spectra obtained by T. Hung’s group is instrumental to a publication, T. Hung reserves the right to decide who leads the paper.

Data Rights and Benefits: The reduced spectra of ZTF TDEs will be made available to ZTFBH. Standard co-authorship policies will apply; i.e. data or significant intellectual contributions provided towards a publication are expected to result in offered co-authorship. In terms of spectra from the UCSC group, UCSC members who contributed to the acquisition (PI and observers) and reduction of data should be offered co-authorship. T. Hung reserves the right to lead the classification report on ATel if the classification spectrum is obtained by T. Hung’s group.

Duration: This agreement covers the period from 1 November 2019 through 30 September 2020 and can be renewed annually based on mutual satisfaction.