

TZU-YU (TIARA) HUNG

Email : thung5@ucsc.edu

RESEARCH POSITIONS

Postdoctoral Scholar, UC Santa Cruz, Santa Cruz, CA	2018–Present
Graduate Researcher, University of Maryland, College Park, MD	2014–2018
Teaching Assistant, University of Maryland, College Park, MD	2013–2014
Research Assistant, Academia Sinica Institute of Astronomy and Astrophysics, Taiwan	2011–2013

EDUCATION

University of Maryland, College Park, MD	
PhD, Astronomy	2018
MS, Astronomy	2015
National Chiao Tung University, Hsinchu, Taiwan	
BS, Electrophysics	2013

SUCCESSFUL PI OBSERVING PROPOSALS

7 observing programs as PI with research funding totaling \$175k since 2019.

20+ observing programs as co-I.

The Neil Gehrels Swift Observatory Cycle 17, with funding \$40k	2021
<i>Early UV and X-ray Evolution of Tidal Disruption Events in YSE</i>	
Hubble Space Telescope Cycle 27, 3 orbits, with funding \$34.4k	2019
Director's Discretionary Time	
<i>Caught in the Act: Closest TDE Discovered Before Peak Light</i>	
Hubble Space Telescope Cycle 27, 11 orbits, with funding \$78.1k	2019
<i>Late-time UV spectroscopy of Tidal Disruption Events with HST</i>	
Las Cumbres Observatory, 21 hr	2019B
<i>Multi-Color Photometric Monitoring of Tidal Disruption Events</i>	
Hubble Space Telescope Cycle 26, 3 orbits, with funding \$22.7k	2019
Director's Discretionary Time	
<i>Searching for Outflow Signatures in the Tidal Disruption Event ZTF18abxftqm</i>	
Gemini Observatory, 10.2 hr	2019A
<i>Early spectroscopic evolution of tidal disruption events</i>	
Gemini Fast Turnaround, 2.6 hr	2016
<i>iPTF16fnl: A Tidal Disruption Event at 65 Mpc</i>	

PRESS COVERAGE

<i>"New observations of black hole devouring a star reveal rapid disk formation"</i>	Aug 26, 2020
UCSC News Center	

AWARDS AND GRANTS

COSPAR 2021 Travel Grant	2021
Kyoto TDE Conference Travel Grant	2020
<i>For the conference "Tidal Disruption Events: General Relativistic Transients"</i>	
Aspen Winter Conference Travel Grant	2018
<i>For the conference "Using tidal disruption events to study super-massive black holes".</i>	
Israel Institute for Advanced Studies Travel Grant	2017
<i>Travel grant to attend the 35th Jerusalem Winter School in Theoretical Physics.</i>	
NSF GROWTH Exchange Program	2017

<i>Travel grant to collaborate and work in the ZTF commissioning team at Caltech.</i>	
John Chi-Lin Wang Award for Academic Excellence	2015
<i>Best overall performance in course grades, second year project, and qualifying exam.</i>	
Deans Fellow, Dept. of Astronomy, UMD	2013
University Student Research Fellowship, NSF, Taiwan	2012
Academic Achievement Award, National Chiao Tung University, Taiwan	2009-2011

INVITED AND CONTRIBUTED TALKS

European Astronomical Society Annual Meeting, Virtual Meeting	2021
An Observational Overview of Tidal Disruption Events, Invited speaker	
X- and Gamma-ray Counterparts of New Transients in the Multimessenger Era, Australia	2021
<i>Understanding Tidal Disruption Events Through Observations</i> , Invited speaker	
Tidal Disruption Events: General Relativistic Transients, Japan	2020
<i>The Demographics of Tidal Disruption Events</i> , Invited speaker	
235th AAS meeting, HI, USA	2020
<i>Discovery of Highly Blueshifted Broad Balmer Absorption Lines in a TDE</i> , Suggested speaker	
Time Domain Astrophysics with Swift III, Clemson, USA	2018
<i>Tidal Disruption Events in Optical Time Domain</i> , Invited speaker	
Special Seminar, Tokyo, Japan	2018
<i>Systematic Selection of Tidal Disruption Events in iPTF</i> , Invited speaker	
Using Tidal Disruption Events to Study Super-Massive Black Holes, Aspen CO, USA	2018
<i>Sifting for Sapphires: Systematic Selection of Tidal Disruption Events in iPTF</i>	
231th AAS meeting, Washington DC, USA	2018
<i>Sifting for Sapphires: Systematic Selection of Tidal Disruption Events in iPTF</i>	
GROWTH Conference, Milwaukee WI, USA	2017
<i>Overview of the GROWTH web marshal</i>	
Unveiling the Physics Behind Extreme AGN Variability, Virgin Islands, USA	2017
<i>Wavelength-Dependent Variability of AGN in the UV and Optical from GALEX and PS1</i>	
ZTF Summer Undergraduate Astronomy Institute, Pasadena CA, USA	2017
<i>Finding Supermassive Black Holes with Tidal Disruption Events</i> , Invited speaker	
iPTF Summer School, Pasadena CA, USA	2016
<i>Supermassive Black Holes in the Time Domain Universe</i> , Invited speaker	

PROFESSIONAL SERVICE

Reviewer for Nature Communications	2020-
Reviewer for the Monthly Notices of the Royal Astronomical Society	2020-
Reviewer for the Astrophysical Journal	2019-
NASA Proposal Review Panel	2018

OBSERVING EXPERIENCE

Keck	
Low Resolution Imaging Spectrometer	5 nights
Echelle Spectrograph and Imager	2 night
Gemini	
Gemini Multi-Object Spectrographs	
Lick Observatory	
Kast spectrograph on Shane Telescope	15 nights
Discovery Channel Telescope	
DeVeny Spectrograph	20 nights

Large Monolithic Imager
Palomar 200-inch Telescope
Double Spectrograph

4 nights

3 nights

DIVERSITY AND PUBLIC OUTREACH

LAMAT Program Mentor

2020

- Mentored undergraduate student Jessica Johnson (SJSU/UCSC) on the UV and optical data analysis of the TDE DES14C1kia. Results are currently being organized into a paper to be submitted to ApJ.

GRAD-MAP Summer School Mentor

2016

- Mentored undergraduate student Madison Rae Smith (Montgomery College/UMd) and Tiffany Schoolfield (Montgomery College) on examining the performance of the image subtraction pipeline used by the Zwicky Transient Facility and determining the efficiency at detection nuclear transients.

Master of Ceremonies for UMD Observatory Open House

2013–2016

FIRST AUTHOR PUBLICATIONS

First Author: 7; Total refereed citations: 136; h-index: 5

My publications list on the NASA Astrophysics Data System:

<https://ui.adsabs.harvard.edu/#/public-libraries/9TGC1RuXT-i1hF40t9NMLQ>

[1] *Discovery of a Fast Iron Low-ionization Outflow in the Early Evolution of the Nearby Tidal Disruption Event AT 2019qiz*

T. Hung, R. J. Foley, S. Veilleux, S.B. Cenko, J. Dai et al. *submitted to ApJ, arXiv:2011.01593*

[2] *Double-Peaked Balmer Emission Indicating Prompt Accretion Disk Formation in an X-Ray Faint Tidal Disruption Event*

T. Hung, R. J. Foley, E. Ramirez-Ruiz, J. Dai, K. Auchettl et al., *ApJ* **903**, 31 (2020)

[3] *Discovery of Highly Blueshifted Broad Balmer and Metastable Helium Absorption Lines in a Tidal Disruption Event*

T. Hung, S.B. Cenko, N. Roth, S. Gezari, S. Veilleux et al., *ApJ* **879**, 119 (2019)

[4] *A Mini Survey of Methyl Cyanide toward Extended Green Objects*

T. Hung, S.-Y. Liu, Y.-N. Su, J. H. He, H.-T. Lee, S. Takahashi, and H.-R. Chen, *ApJ* **872**, 61 (2019)

[5] *Sifting for Sapphires: Systematic Selection of Tidal Disruption Events in iPTF*

T. Hung, S. Gezari, S. B. Cenko, S. van Velzen, N. Blagorodnova, Lin Yan, S. R. Kulkarni, R. Lunnan, T. Kupfer, G. Leloudas, A. K. H. Kong, P. E. Nugent, C. Fremling, Russ R. Laher, F. J. Masci, Y. Cao, R. Roy, and T. Petrushevskaya, *ApJ Supplement Series* **238**, 15 (2018)

[6] *Revisiting Optical Tidal Disruption Events with iPTF16axa*

T. Hung, S. Gezari, N. Blagorodnova, N. Roth, S. B. Cenko, S. R. Kulkarni, A. Horesh, I. Arcavi, C. McCully, Lin Yan, R. Lunnan, C. Fremling, Y. Cao, P. E. Nugent, and P. Wozniak, *ApJ* **842**, 29 (2017)

[7] *The GALEX Time Domain Survey. II. Wavelength-Dependent Variability of Active Galactic Nuclei in the Pan-STARRS1 Medium Deep Survey*

T. Hung, S. Gezari, D. O. Jones, R. P. Kirshner, R. Chornock, E. Berger, A. Rest, M. Huber, G. Narayan, D. Scolnic, C. Waters, R. Wainscoat, D. C. Martin, K. Forster, J. D. Neill, *ApJ* **833**, 226 (2016)

SELECTED PUBLICATIONS

Nth Author: 27; Total refereed citations: 1072; h-index: 16

[1] *Optical-Ultraviolet Tidal Disruption Events*

S. van Velzen, Sjoert, T. W.-S. Holoien, F. Onori, **T. Hung**, I. Arcavi, Space Science Reviews **216** 124 (2020)

[2] *Discovery and Follow-up of ASASSN-19dj: An X-ray and UV Luminous TDE in an Extreme Post-Starburst Galaxy*

Hinkle et al. incl. **T. Hung**, MNRAS **2967** (2020)

[3] *Optical Polarimetry of the Tidal Disruption Event AT2019DSG*

C-H. Lee, **T. Hung**, T. Matheson et al., ApJL **892** 1 (2020)

[4] *A high-energy neutrino coincident with a tidal disruption event*

Stein et al. incl. **T. Hung**, submitted to Nature Astronomy arXiv: **2005.05340** (2020)

[5] *A New Class of Changing-Look LINERs*

Frederick et al. incl. **T. Hung**, ApJ **883** 31 (2019)

[6] *The Growth Marshal: A Dynamic Science Portal for Time-Domain Astronomy*

M.M. Kasliwal, C. Cannella, A. Bagdasaryan, **T. Hung** et al., PASP **131**, 997 (2019)

[7] *The first tidal disruption flare in ZTF: from photometric selection to multi-wavelength characterization*

S. van Velzen, S. Gezari, S.B. Cenko, E. Kara, J.C.A. Miller, **T. Hung** et al., ApJ **872**, 198 (2019)

[8] *Black hole masses of tidal disruption event host galaxies*

T. Wevers, S. van Velzen, P. G. Jonker, N. C. Stone, **T. Hung** et al., MNRAS **471**, 2, p1694–1708 (2017)

[9] *iPTF16fnl: A Faint and Fast Tidal Disruption Event in an E+A Galaxy*

N. Blagorodnova, S. Gezari, **T. Hung**, S. R. Kulkarni, S. B. Cenko et al., ApJ **844**, 46 (2017)

[10] *iPTF Discovery of the Rapid "Turn-on" of a Luminous Quasar*

S. Gezari, **T. Hung**, S. B. Cenko, N. Blagorodnova, Lin Yan et al., ApJ **835**, 144 (2017)

Astronomer's Telegram: 12299, 12110, 12036, 12035, 12734, 12789, 12813, 19433, 13127, 13143, 13167, 13899