

# Chih-Chun “Dino” Hsu

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<b>EDUCATION</b>	<b>University of California, San Diego</b> , La Jolla, CA, USA Doctor of Philosophy (Ph.D.) in Physics Advisor: Adam Burgasser	Expected June 2022
	<b>National Tsing Hua University</b> , Hsinchu, Taiwan Bachelor of Science (B.S) in Physics	June 2014
<b>RESEARCH INTERESTS</b>	Lowest-mass stars, brown dwarfs, exoplanets; medium- and high-resolution spectroscopy; very low-mass binaries; stellar populations; stellar kinematics; stellar rotation	
<b>RESEARCH EXPERIENCE</b>	<b>Graduate Research Student</b> Center for Astrophysics and Space Sciences, UC San Diego, La Jolla, CA Advisor: Adam Burgasser	2016-present
	<b>Research Assistant</b> Institute of Astronomy, National Tsing Hua University, Hsinchu, Taiwan Supervisor: Huei-Ru Vivien Chen	2015-2016
	<b>Undergraduate Research Student</b> Physics Department, National Tsing Hua University, Hsinchu, Taiwan Advisor: Kingman Cheung	2013-2014
	<b>Friends of the International Center fellowship</b> (\$2,000) UC San Diego, La Jolla, CA Awarded for promoting international friendship, understanding, and cooperation.	2020
<b>ACADEMIC HONORS &amp; AWARDS</b>	<b>Carol and George Lattimer Award for Graduate Excellence</b> (\$2,000) UC San Diego, La Jolla, CA Awarded to graduate students in the Divisions of Physical Sciences who seek interdisciplinary approaches to problem-solving and have a strong commitment to education, mentorship, and service.	2019-2020
	<b>Physics Chair’s Challenge Award</b> *2 (\$500) UC San Diego, La Jolla, CA Awarded for supporting educational excellence and training for current physics students.	2017-2018
	<b>Physics Excellence Award</b> (\$9,200) UC San Diego, La Jolla, CA Awarded to the most highly qualified students admitted to the Physics PhD program.	2016
	<b>College of Science Elite Student Award</b> *3	2012-2014

National Tsing Hua University, Hsinchu, Taiwan  
Awarded to the top student of class based on academic achievements.

**Academic Achievement Award \*5** 2011-2014  
National Tsing Hua University, Hsinchu, Taiwan  
Awarded to top 5 % of class.

**College of Science Scholarship** 2013  
National Tsing Hua University, Hsinchu, Taiwan  
Awarded to one student in College of Science based on academic achievements.

**PUBLICATIONS** Paudel, R. R., Gizis, J. E., Burgasser, A. J., **Hsu, C.**, "2MASS J10274572+0629104: the very short period young M6 dwarf binary system identified in K2 data", MNRAS, 486, 4144, July 2019

**Hsu, C.**, Burgasser, A. J., Theissen, C. A., Birky, J. L., Gelino, C. R., Blake, C. H.,  
"The Brown Dwarf Kinematics Project (BDKP). V. Radial and Rotational Velocities of T Dwarfs From Keck/NIRSPEC High-Resolution Spectroscopy", in prep.

**TALKS** "Precise Radial and Rotational Velocities of Ultracool Dwarfs Using a Forward-Modeling Method with High-Resolution Spectroscopy" February 4, 2020  
High-Resolution Infrared Spectroscopy for Exoplanet Characterization Hackathon, Caltech, Pasadena, CA

"Radial and Rotational Velocities of Ultracool Dwarfs From High-Resolution Spectroscopy" March 5, 2019  
AMNH Astrophysics seminar, American Museum of Natural History, New York, NY

"Radial and Rotational Velocities of Ultracool Dwarfs From High-Resolution Spectroscopy" February 15, 2019  
CASS Journal Club, UC San Diego, La Jolla, CA

**POSTERS** "Precise Radial and Rotational Velocities for T Dwarfs Using NIRSPEC High-Resolution Spectrometer" September 2019  
Keck Science Meeting 2019, UCLA, Los Angeles, CA

"Precise Radial and Rotational Velocities of Ultracool Dwarfs with APOGEE High-Resolution Spectra" June 2019  
SDSS-IV/V Collaboration Meeting 2019, Ensenada, Mexico

"Radial and Rotational Velocities for 300+ Ultracool Dwarfs from NIRSPEC High-Resolution Spectroscopy" January 2019  
233rd AAS Meeting, Seattle, WA

"Toward Measurements of Radial and Rotational Velocities of 300+ Ultracool Dwarfs from NIRSPEC High-Resolution Spectroscopy" September 2018  
Keck Science Meeting 2018, Caltech, Pasadena, CA

"Precise Radial Velocities to Detect Exoplanets around Ultracool Dwarfs Using the NIRSPEC High-Resolution Spectrograph" September 2018  
ExSoCal 2018, Caltech, Pasadena, CA

	<i>"Refined Measurements of Radial and Rotational Velocities of 300+ Ultracool Dwarfs from NIRSPEC High-Resolution Spectroscopy"</i> Cool Stars 20, Boston University, Cambridge, MA		July 2018
<b>WORKSHOPS</b>	<i>High-Resolution Infrared Spectroscopy for Exoplanet Characterization Hackathon</i> Caltech, Pasadena, CA		February 4-6 2020
	<i>Telluric Line Hack Week Workshop</i> Flatiron Institute, New York, NY		February 25-28 2019
	<i>2017 Kraft Observational Astronomy Workshop</i> Lick Observatory, Mount Hamilton, CA		October 12-16 2017
	<i>SciCoder Workshop</i> Vanderbilt University, Nashville, TN		July 31-August 4 2017
<b>TELESCOPE TIME AWARDED</b>	<i>W. M. Keck Telescopes, Keck II 10-meter</i> Co-I: "Completing the Kinematic Census of Local T Dwarfs" • 3 nights awarded (NIRSPEC)		2019-2020
	Co-I: "Searching for Our Coldest Young Neighbors with Backyard Worlds: Planet 9" • 6 nights awarded (NIREs)		2018-2020
	<i>NASA InfraRed Telescope Facility (IRTF)</i> Co-I: "Training the Cannon: Calibrating APOGEE Observations of Ultracool Dwarfs" • 6 nights awarded (iSHELL)		2018-2020
<b>ADDITIONAL OBSERVING EXPERIENCE</b>	<i>Keck II 10-meter/NIRSPEC 7 nights</i>		2017-2018
	<i>Keck I 10-meter/HIRES 0.5 nights</i>		2018
	<i>Shane Telescope 3-meter</i> • Kast Double Spectrograph: 13 nights • ShaneAO/ShARCS: 1 night		2018-2020 2019
<b>TEACHING</b>	<i>Teaching assistant for PHYS 2BL</i> UC San Diego, La Jolla, CA • lower-division electricity & magnetism lab for engineering and physical science majors		Fall 2016, Winter 2017
	<i>Teaching assistant for PHYS 2DL</i> UC San Diego, La Jolla, CA • lower-division modern physics lab for engineering and physical science majors		Spring & Fall 2017, 2019, Spring 2020
	<i>Teaching assistant for PHYS 160</i> UC San Diego, La Jolla, CA • upper-division introductory stellar astrophysics course for physical science majors		Winter 2018, Fall 2018
	<i>Teaching assistant for PHYS 1A</i> UC San Diego, La Jolla, CA • lower-division mechanics lab for life-science majors		Spring 2018

*California Professoriate for Access to Physics Careers (CPAPC)*  
*Southern California Physics GRE Bootcamp* August 2017  
• UC San Diego, La Jolla, CA

*Python Workshop for Physics Undergraduate Students* November 2019  
• UC San Diego, La Jolla, CA

**PUBLIC  
OUTREACH**

**2019 Institute for Scientist & Engineer Educations (ISEE)  
Professional Development Program (PDP)** March-September 2019  
UC Santa Cruz/UC Los Angeles, CA  
• Professional development team focused on effective and inclusive teaching, including mentoring, and also includes training in professional skills such as communication, teamwork, collaboration, and leadership.

**Institute of the Americas (IOA) Science Innovation Camp** July 20 2017  
UC San Diego, La Jolla, CA  
• Physics outreach activity designed for Latin American high school students (14-18 years old)

**The Barrio Logan Science & Art Expo** March 16 2019  
Mercado del Barrio, San Diego, CA  
• Physics outreach activity designed for Mexican families from around southern San Diego

**PROFESSIONAL AFFILIATIONS** **American Astronomical Society (AAS)** 2018-Present

**SKILLS** Python, Github, Markov Chain Monte Carlo  
Languages: Mandarin (native), English (fluent)

**REFERENCES** **Dr. Adam Burgasser**  
Professor of Physics  
University of California San Diego  
9500 Gilman Drive 0424, La Jolla, California 92093-0424, USA  
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**Dr. Quinn Konopacky**  
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**Dr. Christopher Theissen**  
NASA Sagan Postdoctoral Fellow  
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