

# Marc Teng Yen Hon

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Institute for Astronomy  
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<b>Principal Interests</b>	Asteroseismology, Stellar Evolution, Exoplanetary Science, Machine Learning	
<b>Research Experience</b>	<b>Institute for Astronomy, University of Hawai'i at Mānoa</b> <i>NASA Hubble Fellow</i> , Nov 2020 - Present Unraveling the History of the Galaxy with TESS Asteroseismology Advisor: Prof. Daniel Huber	
<b>Education</b>	<b>UNSW Sydney, New South Wales, Australia</b> <i>Doctor of Philosophy</i> , Astrophysics, July 2020 Thesis: Deep Learning in Asteroseismology Advisor: Prof. Dennis Stello  <b>University of Wollongong, New South Wales, Australia</b> <i>Bachelor of Science Advanced (1<sup>st</sup> Class Honours)</i> , Physics and Mathematics, December 2015 Thesis: Magnetic Vortices in Micro-magnetic Materials Advisor: Prof. Alexey Pan	
<b>Awards and Scholarships</b>	NASA Hubble Fellowship Program	2021-present
	UNSW Dean's Award for Outstanding PhD Theses	2021
	Nvidia Developer Grant	2018
	UNSW International Scholarship	2016
	University of Wollongong (UoW) University Medal	2015
	UoW Australian Institute of Physics Prize	2015
	UoW Kittel-Lewis Prize	2015
	UoW David Martin Award	2015
<b>Outreach and Presentations</b>	— <i>Global Malaysian Astronomers Convention</i> , Kuala Lumpur, Malaysia (Invited)	2023
	— <i>American Astronomical Society 241, Winter Meeting</i> , Washington, Seattle	2023
	— <i>AMNH Astro Seminar</i> , AMNH, New York, USA (Invited)	2022
	— <i>TESS Science Talk</i> MIT, Cambridge, USA (Invited)	2022

— <i>Cosmic Origins Program Seminar Series</i> , NASA Stars Science Interest Group (Invited)	2022
— <i>Science, Mathematics and Technology Seminar Series</i> SUTD, Singapore (Invited)	2022
— <i>TESS Science Conference II</i> , MIT, Cambridge, USA (Contributed Talk)	2021
— <i>Astronomy Colloquium</i> , Yale University, New Haven, USA (Invited)	2021
— <i>Institute for Astronomy Colloquium</i> , University of Hawai'i, USA (Invited)	2021
— <i>TASC-5/KASC-12 Conference</i> , MIT, Cambridge, USA (Contributed Talk)	2019
— <i>TASC-4/KASC-11 Conference</i> , Stellar Astrophysics Center, Aarhus, Denmark (Contributed Talk)	2018
— <i>SAGE Seminar</i> , Max Planck Institute for Solar System Research, Göttingen, Germany (Invited)	2018
— <i>Stars in Sydney Conference</i> , Macquarie University, Sydney, Australia (Contributed Talk)	2017

## Teaching Experience

<b>Research Supervisor, Institute for Astronomy, Hawai'i</b>	
— ASTR699 Research (Keyan Gootkin)	2022-present
— Research Experiences for Undergraduates	2022-present
<b>Academic Lecturer, Institute for Astronomy, Hawai'i</b>	
— ASTR 631 Radiative Transfer Stellar Atmospheres	2022
<b>Academic Tutor, School of Physics, UNSW Sydney</b>	
— PHYS3116 – Astrophysics Tutor	2019
— PHYS3116 – Astrophysics Lecturer	2018
<b>Research Supervisor, School of Physics, UNSW Sydney</b>	
— PhD research co-mentor (Claudia Reyes)	2021-present
— Honours research co-mentor (Lauren Taylor, Rudy Xu, Tommy Lee)	2018-2021
— Taste for Research Undergraduate program (Noah Vinod, David Nguyen, Ryan Oldfield)	2018-2020
— MSc research co-mentor (Shabib Rizvi)	2017
<b>Lab Assistant, University of Wollongong</b>	
— PHYS141/142 Fundamentals of Physics	2015
— PHYS225 Electromagnetism and Optoelectronics	2015

<b>Professional Membership and Service</b>	— Malaysia Olympiad on Astronomy & Astrophysics council member	2023-present
	— Institute for Astronomy Colloquium Committee	2022-present
	— Journal Referee for <i>The Astrophysical Journal</i>	2020-present
	— Journal Referee for <i>Monthly Notices of the Royal Astronomical Society</i>	2019-present
	— Journal Referee for <i>Astronomy &amp; Astrophysics</i>	2018-present
	— Astronomical Society of Australia Member	2017-2021
	— APOGEE-2-Kepler Asteroseismology and Chemical Abundance Collaboration	2018-present
	— TESS Asteroseismic Science Consortium	2017-present
	— TESS Data for Asteroseismology Core Member	
	— <i>Kepler</i> Asteroseismic Science Consortium	2016-present
<b>Proposals</b>	— Confirming <i>Gaia</i> Binaries with Impossibly Small Separations, Keck I, <b>10h, PI</b>	2023
	— Fossil Magnetic Fields at the Surface of Seismically Peculiar Red Giants, CHFT, <b>10h, PI</b>	2022
	— Confirming the First Close-in Planet Surviving Host Giant Star Evolution, Keck I + CHFT, <b>2n + 10h, PI</b>	2021-2022
	— TESS's Ear on The Metal-Poor Milky Way, TESS GI Cycle 5, <b>Co-I</b>	2022
	— Exploring the Planet Population Around Evolved Stars with TESS, TESS GI Cycle 4, <b>Co-I</b>	2021
	— The K2-HERMES follow-up program, AAT, <b>69n, Co-I</b>	2016-2019
	— The HERMES-TESS program, AAT, <b>31n, Co-I</b>	2016-2018
<b>Selected Press</b>	— "NASA's TESS Tunes into an All-sky 'Symphony' of Red Giant Stars", <a href="#">NASA</a>	Aug 2021
	— "An all-sky red giant star symphony", <a href="#">EarthSky</a>	Aug 2021
	— "Stellar pulses are transformed into a celestial symphony", <a href="#">Space.com</a>	Aug 2021
	— "How AI Can Determine the Future of Red Giants Like Our Sun", <a href="#">Nvidia Blog</a>	Aug 2017
	— "Scientists Are Using Artificial Intelligence to Plot the Galaxy", <a href="#">Inverse</a>	May 2017
<b>Observing Experience</b>	Anglo-Australian Telescope 3.9 meter, HERMES spectrograph	9 nights

## References

*Daniel Huber*

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University of Hawai'i – Manoa

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*Dennis Stello*

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*Marc Pinsonneault*

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Department of Astronomy  
The Ohio State University

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