

# TAN HONG KIAT

✉ [hongkiat777@gmail.com](mailto:hongkiat777@gmail.com)

✉ [maxtanhk@g.ucla.edu](mailto:maxtanhk@g.ucla.edu)

🌐 [maxtanhk.com](http://maxtanhk.com)

## EDUCATION

---

**University of California, Los Angeles**

**Aug 2021 - 2026 (Expected)**

*Ph.D. Candidate, Applied Mathematics*

*GPA: 3.97/4.0*

**University of California, Los Angeles**

**Aug 2021 - Jun 2022**

*M.A in Mathematics*

**National University of Singapore**

**Aug 2017 - May 2021**

*Bachelor of Science (Honours) in Applied Mathematics with Highest Distinction*

*CAP: 4.97/5.00*

- Second Major: Physics
- Minor: Statistics

## RESEARCH INTERESTS

---

**Partial Differential Equations**

**Mathematical and Computational Physics**

**Statistics and Machine Learning**

## PUBLICATIONS

---

- *Regularization of Complex Langevin Method.*  
Z. Cai, Y. Kuang, **H.K. Tan**. || Physical Review D 105 (1), 014508.
- *Hierarchical Bayesian Thermonuclear Rate for the  ${}^7\text{Be}$  ( $n, p$ )  ${}^7\text{Li}$  Big Bang Nucleosynthesis Reaction.*  
R.S. de Souza, **H.K. Tan**, A. Coc, C. Iliadis. || The Astrophysical Journal 894 (2), 134.

## HONOURS AND AWARDS

---

**Dean's List**

**2018-2021**

- Awarded to top 5% of the total undergraduate Science students for Academic Year 2018/19, 2019/20, and 2020/21 for both Semesters 1 and 2.

**Ho Family Prize**

**2021**

- Awarded to the best overall student in Applied Mathematics who has passed the examination for Degree of Bachelor of Science (Honours) for Academic Year 2020/21.

**Honour List of Student Tutors**

**2020 - 2021**

- Awarded to student tutors who have attained this excellence during their course of teaching for Academic Year 2019/20 and 2020/21.

**Tan Siak Kew Gold Medal**

**2020**

- Awarded to the best student in Science III for Academic Year 2019/20.

**Tan Teck Chwee Prize**

**2020**

- Awarded to the best student in Applied Mathematics III for Academic Year 2019/20.

**NUS Awards for Study Abroad Enhancement Scholarship**

**2019**

- Awarded to students who are participating in short-term programs or research attachments.

**Sembcorp Marine Prize**

**2019**

- Awarded to two of the best students in Physics III for Academic Year 2018/19.

**Arthur Rajaratnam Prize**

**2019**

- Awarded to the best student in PC2193 Experimental Physics I for Academic Year 2018/19.

**Jurong Shipyard Prize**

**2018**

- Awarded to two of the best students in Physics I for Academic Year 2017/18.

**NUS Merit Scholarship**

**2015**

TEACHING EXPERIENCES

University of California, Los Angeles

Teaching Assistant

Teaching Feedback Scores:

Sep 2021 - Present

Code	Class	Iteration	Overall Effectiveness	Availability/Helpfulness outside of the classroom
Math 174E	Math of Finance for Math/Econs	Spring 2024	In Progress	In Progress
Math 266B	Applied PDEs	Winter 2024	8.86/9.0	9.0/9.0
Math 135	Ordinary Differential Equations	Fall 2023	8.88/9.0	9.0/9.0
Math 134	Linear and Nonlinear Systems of DEs	Spring 2023	8.57/9.0	8.86/9.0
Math 170E	Introduction to Probability	Winter 2023	8.38/9.0	8.25/9.0
Math 131A	Analysis	Summer 2022	8.47/9.0	8.53/9.0
Math 136	Partial Differential Equations	Spring 2022	8.83/9.0	8.82/9.0
Math 32BH	Calculus of Several Variables (Honors)	Winter 2022	8.67/9.0	8.89/9.0
Math 134	Linear and Nonlinear Systems of DEs	Fall 2021	8.67/9.0	8.79/9.0

National University of Singapore

Teaching Assistant, Grader and Student Helper

Teaching Assistant

Jan 2018 – May 2018 | Jan 2019 - May 2021

Teaching Feedback Scores:

Module	Iteration	Overall Effectiveness	Average Score over all Components	Recommendations for Teaching Award
CS1231 Discrete Structures	AY20/21 Sem 2	4.7/5.0	4.5/5.0	4/18
CS1231 Discrete Structures	AY20/21 Sem 1	5.0/5.0	4.9/5.0	12/17
CS1231 Discrete Structures	AY19/20 Sem 2	4.4/5.0	4.4/5.0	11/18
CS1231 Discrete Structures	AY19/20 Sem 1	4.7/5.0	4.6/5.0	4/9
CS1010S Programming Methodology	AY18/19 Sem 2	5.0/5.0	4.8/5.0	5/6

- Grader for CS1010E Programming Methodology, AY2019/20 Sem 2.
- Student Helper for GET1042 Sky and Telescopes, AY2018/19 Sem 2 and AY2017/18 Sem 2.

OTHER SKILLS

- Programming Languages:

Programming Languages	Proficiency
Python	★★★★★
R	★★★★★
Mathematica	★★★★★
LaTeX	★★★★★
MATLAB	★★★★☆
Julia	★★★☆☆

- Language:

Language	Proficiency
English	Native or Bilingual Proficiency
Mandarin Chinese	Native or Bilingual Proficiency