

Mac Lee

Department of Physics
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EDUCATION

University of California, San Diego, CA
Doctor of Philosophy in Physics

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California State University, Northridge, CA
Master of Science in Physics with Distinction, May 2018

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University of Kansas, Lawrence, KS
Completed 24 units toward a Master of Music in Piano Performance
from Aug. 2011 to Dec. 2012

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Azusa Pacific University, Azusa, CA
Bachelor of Music in Piano Performance, July 2011

SCHOLARSHIPS/GRANTS/AWARDS/HONORS

2018 Election to Sigma Pi Sigma

2018 Mack I. Johnson Research Award for Outstanding Graduate Student in the College of
Science and Mathematics (CSUN)

2018 C. Y. Liang Outstanding Graduate Student Award (CSUN)

2017 Leslie and Terry Cutler Scholarship (CSUN)

2016 Summer Research Grant (CSUN)

EMPLOYMENT HISTORY

June 2022 – March 2024 Senior TA/Associate at UCSD
Lab Teaching Assistant Coordinator (LTAC/Head TA) of the PHYS
1-series labs

Aug. 2018 – June 2022 Teaching Assistant at UCSD
Taught PHYS 1BL, 2BL, 2D, 10, and 140A. Lab Teaching Assistant
Coordinator (LTAC/Head TA) of PHYS 2BL in Spring 2020, Spring
2021, Summer I 2021, and Spring 2022.

Nov. 2013 – Aug. 2018 Staff Pianist at Temple City Mandarin Baptist Church

Mar. 2013 – Aug. 2018 Collaborative Pianist

May 2010 – July 2018 Private Piano Teacher

	Member of the Music Teachers Association California from Oct. 2013 to Oct. 2014
Jan. 2018 – May 2018	Teaching Assistant at CSUN Taught PHYS 220AL
Aug. 2013 – Sept. 2016	Hathaway-Sycamores Child and Family Services Learning Center Instructor In my capacity as an instructor at Hathaway-Sycamores, I tutored K-12 students in the LAUSD language arts, math, and the sciences. In addition to the tutoring sessions during weekdays, I also served as the math instructor for the Hathaway-Sycamores Summer SAT Workshop, which was organized in partnership with three local high schools in the years 2014–2016. I reprised the role as the SAT instructor in 2017 and 2018 as a volunteer.
May 2013 – Nov. 2015	Private Math Tutor
Aug. 2011 – Aug. 2012	Graduate Teaching Assistant at KU Taught PIAN 121, 221, 284, and 321

SOFTWARE ENGINEERING SKILLS

Programming Languages with proficiency: Python, Rust, OCaml, Haskell
 Programming Languages with working knowledge: JavaScript, TypeScript, Julia, VimScript
 Others: LLVM IR, MIPS Assembly, WebAssembly, HTML/CSS

PEER REVIEWED PUBLICATIONS

- [2] S.-S. Gong, W. Zheng, M. Lee, Y.-M. Lu, and D. N. Sheng, “Chiral spin liquid with spinon Fermi surfaces in the spin- $\frac{1}{2}$ triangular Heisenberg model”, [Phys. Rev. B **100**, 241111 \(2019\)](#).
- [1] M. Lee, T. R. Look, S. P. Lim, and D. N. Sheng, “Many-body localization in spin chain systems with quasiperiodic fields”, [Phys. Rev. B **96**, 075146 \(2017\)](#).

TALKS AND PRESENTATIONS

- [4] “Stability of SQG Kolmogorov flow with order Rossby corrections”, SoCal Fluids XVII, Apr. 2024.
- [3] “Spin Liquid and Quantum Phase Diagram on a Spin-Orbit Coupled Triangular Lattice”, International Conference on Magnetism, July 2018.
- [2] “Spin Liquid and Quantum Phase Diagram on a Spin-Orbit Coupled Triangular Lattice”, APS March Meeting, Mar. 2018.
- [1] “Many-Body Localization in Spin Chain Systems with Quasiperiodic Fields”, CSUNposium, Apr. 2017.