

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

Aug. 2018–present Teaching Assistant at UCSD

Taught PHYS 1BL, 2BL, 2D, 10, and 140A

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 CFS Learning Center Instructor

In my capacity as an instructor at Hathaway-Sycamores, I tutored K-12 students attending schools 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, WebAssembly

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

- [3] M. Lee, “Spin liquid and quantum phase diagram on a spin-orbit coupled triangular lattice”, International Conference on Magnetism, July 2018.
- [2] M. Lee, “Spin liquid and quantum phase diagram on a spin-orbit coupled triangular lattice”, APS March Meeting, Mar. 2018.
- [1] M. Lee, “Many-body localization in spin chain systems with quasiperiodic fields”, CSUN-posium, Apr. 2017.