

# Karen Yu

Stanley Hall  
University of California, Berkeley

TEL: +1.612.250.7366  
EMAIL: karen.yu@berkeley.edu

## EDUCATION

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2019-PRESENT **Columbia University**  
Ph.D. Physics

2015-2019 **University of California, Berkeley**  
B.A. Physics  
B.A. Economics

## RESEARCH EXPERIENCE

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JUN 2019 – **University of California, Berkeley** Berkeley, CA  
PRESENT *Segré Intern*  
Department of Physics  
Project: Nitrogen Vacancy Centers

JAN 2017 – **University of California, Berkeley** Berkeley, CA  
PRESENT *Undergraduate Student Researcher*  
Department of Chemistry  
Project: Kinetic Asymmetry Between Competitive Lipid Kinase and Phosphatase –  
Inversion of Reaction Outcomes on Membranes  
Advisor: Prof. Jay T. Groves

## ACCOLADES

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OCT 2018 Outstanding Presentation in Theoretical Chemistry –  
*Gulf Coast Undergraduate Research Symposium*

OCT 2018 – Berkeley Physics Undergraduate Research Scholar  
MAY 2019

## PUBLICATIONS

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1. William Y. C. Huang, Scott D. Hansen, **Karen Yu**, Albert A. Lee, and Jay T. Groves. "Kinetic asymmetry between competitive lipid kinase and phosphatase drives inversion of reaction outcomes on membranes." in preparation.

## CONFERENCES & WORKSHOPS

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- JUL 2018    *The Physics of Life Summer School* – Princeton University Center for the Physics of Biological Function, Princeton, NJ
- JAN 2017    *APS Conference for Undergraduate Women in Physics* – UCLA, Los Angeles, CA
- JAN 2016    *APS Conference for Undergraduate Women in Physics* – UCSD, San Diego, CA

## PRESENTATIONS

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- OCT 2018    "Scale Sensitive Reaction Outcomes from Kinetic Asymmetry Between Competitive Lipid Kinase-Phosphatase on Membranes" –  
                  *Gulf Coast Undergraduate Research Symposium*, Rice University, Houston, TX
- APR 2018    "Scale Sensitive Outcomes in a Lipid Kinase-Phosphatase Competitive Reaction" –  
                  *Saegebarth Research Fair*, University of California, Berkeley, Berkeley, CA

## TEACHING EXPERIENCE

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| SUMMER 2018 | Dept. of Physics<br><i>Reader</i><br>PHYS 137A – Quantum Mechanics I | Berkeley, CA |
| SPRING 2018 | Dept. of Physics<br><i>Reader</i><br>PHYS 137A – Quantum Mechanics I | Berkeley, CA |

## SKILLS

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- PROGRAMMING    MatLAB, Python, Java, SQL, LabVIEW