

Yiqi Wang

QUANTUM MECHANICS · OPTOMECHANICS

217 Prospect St, Yale University, New Haven, CT 06520

☎ +1(475) 655-8665 | ✉ yiqi.wang@yale.edu | 🌐 www.yiqiwang.page

Education

Yale University

PH. D. CANDIDACY IN APPLIED PHYSICS

- Ph.D. Candidacy Advisor: Prof. Jack. G. E. Harris, Department of Physics
- Quantum Optomechanics and Quantum Metrology

New Haven, U.S.A.

Aug. 2017 - Present

Fudan University

B.S. IN PHYSICS

- Honor Student Award in Physics In *National Top Undergraduate Training Program*
- Exchange at Chinese University of Hong Kong in 2016 Fall
- Thesis Advisor: Prof. Shiyang Li, Department of Physics

Shanghai, P. R. China

Sept. 2013 - June. 2017

Research Interests

Quantum Optomechanics

Explore potential applications for hybrid optomechanics
Manipulate and measure mechanical resonators in the quantum regime

Quantum Sensing/Metrology

Quantum-enhanced sensitivity in modern fundamental physics search
Quantum metrology advantages

Macroscopic Quantum

Explore quantum theory in macroscopic scales
Quantum gravity phenomenology

Honors & Awards

- 2017 **Yale Ph.D. Fellowship**
- 2017 **Honor Graduates in Shanghai**
- 2016 **XUERSI Scholarship**
- 2014 **2nd Prize** China Undergraduate Physics Tournament Final (CUPT)
- 2014 **1st Prize** China Undergraduate Mathematics Contest in Modeling (CUMCM)

Publications

- 2022 **Y.S.S. Patil, J. Yu, S. Frazier, Y. Wang, K. Johnson, J. Fox, J. Reichel, J.G.E. Harris.** Measuring High-Order Phonon Correlations in an Optomechanical Resonator, *Physical Review Letters* **128**, 183601 (2022)
- 2022 **Y. Wang, et al.** Generation and characterization of an acoustic coherent state *In Preparation*
- 2021 **C. D. Brown, Y. Wang, M. Namazi, G. I. Harris, M. T. Uysal, J. G. E. Harris** Characterization of levitated superfluid helium drops in high vacuum, arXiv:2109.05618 (2021).

Presentation

International Conference on Atomic Physics

POSTER PRESENTER

- Manipulating and Measuring States of an Optomechanical Resonator in the Quantum Regime

Toronto, Canada

July. 2022

Gordon Research Conference

POSTER PRESENTER

- Optomechanics with Magnetically Levitated Helium-4 Drops

Ventura, CA

June. 2022

APS March Meeting

ORAL PRESENTER

- Experimental Test of Quantum Gravity Induced Non-locality Using a Liquid Helium Filled Cavity

Chicago, IL

March. 2022

NONGAUSS Workshop

ORAL PRESENTER

- Measurement of Non-classical Photon-Phonon States in a Superfluid Optomechanical System

Virtual

May, 2021

APS March Meeting

ORAL PRESENTER

- Measurement of Non-classical Photon-Phonon States in a Superfluid Optomechanical System

Virtual

March, 2021

Yale Quantum Institute Talk

ORAL PRESENTER

- Quantum Optomechanics in a Levitated ^4He Drop

New Haven, CT

Nov. 2019

Teaching Experience

PHYS 508 Quantum Mechanics I

GRADUATE TEACHING ASSISTANT FELLOW

Yale University

Sept. 2019 - Dec. 2019

PHYS 201 Fundamental Physics

GRADUATE TEACHING ASSISTANT FELLOW

Yale University

Jan. 2020 - May, 2020

Undergraduate Research Project

UNDERGRADUATE RESEARCH MENTOR

- Mentored undergraduate students for Yale undergraduate research projects.

Yale University

June, 2018 - Present

Professional Activities

Yale-NUS Alumni Mentorship Program

ALUMNI MENTOR

- Mentor a Yale-NUS college student for a 3-month dialogue

July, 2022- Aug. 2022