

Yvonne Y. Gao

Presidential Young Professor,
National University of Singapore
Email: yvonne.gao@nus.edu.sg
Website: quantumcrew.org



Professional Experience

Associate Professor, National University of Singapore	2026 - present
Assistant Professor, National University of Singapore	2020 - 2025
Ph.D, Yale University	2012 - 2018
B.A in Physics, University of Oxford	2008 - 2011

Selected Publications ([Google scholar](#))

- Pan, ..., **Yvonne Y. Gao**[†]
Realization of Versatile and Effective Quantum Metrology Using a Single Bosonic Mode,
PRX Quantum 6, 010304 (2025)
- Krisnanda, ..., **Yvonne Y. Gao**[†]
Demonstrating Efficient and Robust Bosonic State Reconstruction via Optimized Excitation Counting,
PRX Quantum 6, 010303 (2025)
- F. Valadares, ..., **Yvonne Y. Gao**[†]
On-demand transposition across light-matter interaction regimes in bosonic cQED,
Nat Commun 15, 5816 (2024)
- X. Pan, ..., **Yvonne Y. Gao**[†]
Protecting the quantum interference of cat states by phase-space compression,
Phys. Rev. X 13(2), 021004 (2023)
- Yvonne Y. Gao**, et al.
Entanglement of Bosonic Modes via an Engineered Exchange Coupling,
Nature 566, 509–512 (2019)
- Yvonne Y. Gao**, et al.
Programmable interference between two microwave quantum memories,
Phys. Rev. X 8, 021073 (2018)
- C. Wang, **Yvonne Y. Gao**, et al.
A Schrödinger cat living in two boxes,
Science Vol.352, Issue 6289 (2016)

Patents

- C. Wang, **Yvonne Y. Gao**, et al.
Techniques for manipulation of two-qubit quantum states and related systems and methods,
U.S Patent No.16/068, 405
- Liang Jiang, S. M. Girvin, **Yvonne Y. Gao**, B. J. Lester, R. J. Schoelkopf
Robust quantum logic gates
U.S Provisional Patent No. 62/613, 866

Honours and Awards

International Year of Quantum, Quantum100 award	2025
Singapore Young Scientist Award	2022
Presidential Young Professor award, Singapore	2021
National Research Foundation Fellowship	2020
MIT Tech Review TR35 (Asia Pacific)	2019
National Science Scholarship (Undergraduate & Ph.D)	2008