

Xiaodong Hu

330L Higgins Hall
Boston College
140 Commonwealth Ave, MA 02467

Phone: (1) 857-272-7073
Email: xiaodong.hu@bc.edu
Homepage: <https://github.com/cdqz2014>

Education

Boston College
2018-2024 (expected)

Ph.D in Condensed Matter Theory
Advisor: *Ying Ran*

University of Science and Technology of China
2014-2018

B.S. in Theoretical Physics

Research Interests

Publications

X-D. Hu, D. Xiao, and Y. Ran, *Hyperdeterminants and Composite Fermion States in Fractional Chern Insulators*, (submitted to PRX)

X-D. Hu, J-H. Han, and Y. Ran, *Supercurrent-induced anomalous thermal Hall effect as a new probe to superconducting gap anisotropy*, Phys. Rev. B **108**, L041106 (2023)

X-D. Hu, and Y. Ran, *Engineering chiral topological superconductivity in twisted Ising superconductors*, Phys. Rev. B **106**, 125136 (2022)

F. Bahrami, X-D. Hu, Y. Du, O. I. Lebedev, C. Wang, H. Luetkens, G. Fabbri, M. J. Graf, D. Haskel, Y. Ran, and F. Tafti, *First demonstration of tuning between the Kitaev and Ising limits in a honeycomb lattice*, Sci. Adv. **8**, eabl5671 (2022)

Presentations

Engineering Chiral Topological Superconductivity in Twisted Ising Superconductors, Talk, APS March Meeting, 2023

Supercurrent-induced anomalous thermal Hall effect as a new probe to superconducting gap anisotropy, Talk, online APS March Meeting, 2023

Techniques

Programming Languages Julia, Python, Rust, Mathematica, Bash.

Teaching Experiences

I used to be teaching assistant during my journey of study, including Classical Mechanics, Electrodynamics, Quantum Mechanics I/II and Statistical Physics I/II in Boston College.

Last updated: October 18, 2023