

JINGHUI LIU

Department of Physics, MIT, Cambridge MA 02139
+1 6178931698 | e: jinghliu@mit.edu | web: <https://jinghui-liu.github.io>

EDUCATION

Massachusetts Institute of Technology
PhD Candidate, Department of Physics
Peking University
Bachelor of Science in Physics

Cambridge MA, US
2016 - 2022 (Expected)
Beijing, China
2012 - 2016

RESEARCH INTEREST

Active Soft Materials, Pattern Formation, Non-equilibrium Physics

PUBLICATIONS

- **Liu J**, Totz J F, Miller P W, Hastewell A D, Dunkel J, Fakhri N. Topological braiding and virtual particles on the cell membrane. Submitted.
- Wigbers M C*, Tan T H*, Brauns F, **Liu J**, Swartz S Z, Frey E, Fakhri N. (2021). A hierarchy of protein patterns robustly decodes cell shape information. *Nature Physics*, 1-7.
- Tan T H*, **Liu J***, Miller P W*, Tekant M, Dunkel J, Fakhri N. (2020). Topological turbulence on the membrane of a living cell. *Nature Physics*, 1-6.
- Hoek T A, Axelrod K, Biancalani T, **Liu J**, Gore J. (2016). Resource availability modulates the cooperative and competitive nature of a microbial cross-feeding mutualism[J]. *PLoS biology*, 14(8).

SELECTED AWARDS AND HONORS

- **Rising Star Award** in Soft and Biological Matter, UChicago Materials Research Center Oct. 2020
- **Student Speaker Award Finalist**, GSNP (Topical Group on Statistical and Nonlinear Physics), APS Mar. 2020
- **Grand Poster Prize**, MIT Biophysics Retreat Oct. 2019
- **Morton E. Goulder Presidential Fellowship**, Department of Physics, MIT 2016 - 2017
- Wusi Scholarship, Peking University 2014 - 2015
- Weiming Scholarship for Undergraduate Research, Peking University 2013 - 2014

CONTRIBUTED TALKS

2021 APS March Meeting (Virtual)	Virtual
2020 UChicago Rising Stars in Soft and Biological Matter Symposium (Virtual)	Chicago, IL
2020 MIT Physics Departmental Special Tuesday Lunch Talk Series (Virtual)	Cambridge, MA
2020 APS March Meeting (Virtual)	Virtual
2019 Gordon Research Seminar on Soft Condensed Matter Physics , Colby-Sawyer College	New London, NH
2019 Theory of Living Systems Meeting , Boston University	Boston, MA
2019 APS March Meeting	Boston, MA
2018 Annual Biophysics Retreat , MIT	Provincetown, MA
2018 APS March Meeting	Los Angeles, CA

POSTERS

2019 Annual Biophysics Retreat, MIT	Provincetown, MA
2019 Gordon Research Conference on Soft Condensed Matter Physics , Colby-Sawyer College	New London, NH
2015 Annual Biophysics Retreat, MIT	Provincetown, MA
2014 Annual Undergraduate Research Honor Program in Biology Retreat, Peking University	Beijing, China

TEACHING AND SERVICES

Teaching Assistant , MIT course 8.13, "Junior Lab"	
Feb. 2021 – Current	Cambridge, MA
Teaching Assistant , MIT course 8.241, "Introduction to Biological Physics"	
Feb. 2020 – May. 2020	Cambridge, MA
Departmental Advising Resources for Easing Friction and Stress (PhysREFS)	
Jul. 2019 – Current	Cambridge, MA

ADDITIONAL INFORMATION

- **Language**: TOEFL 111 (Reading 30 + Listening 29 + Speaking 26 + Writing 26)

*: Authors contribute equally to the publication