CURRICULUM VITAE

Lijie Ding

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Education

2022 (expected) Ph.D. (Physics), Brown University

Dissertation: Chiral Liquid Crystal on Deformable Surfaces: A Monte Carlo Study

Advisor: Robert A. Pelcovits and Thomas R. Powers

2017 B.Sc. (Applied Physics), University of Science and Technology of China

Thesis: Irreversible Monte Carlo Algorithms

Advisor: Youjin Deng

Publications

4. Lijie Ding, Robert A. Pelcovits, and Thomas R. Powers. Deformation and orientational order of chiral membranes with free edges. *Soft Matter*, 17:6580–6588, 2021

- 3. Lijie Ding, Robert A Pelcovits, and Thomas R Powers. Shapes of fluid membranes with chiral edges. *Physical Review E*, 102(3):032608, 2020
- 2. Shayan Lameh, Lijie Ding, and Derek Stein. Controlled Amplification of DNA Brownian Motion Using Electrokinetic Noise. *Physical Review Applied*, 14(5):054042, 2020
- 1. Eren Metin Elçi, Jens Grimm, Lijie Ding, Abrahim Nasrawi, Timothy M Garoni, and Youjin Deng. Lifted worm algorithm for the Ising model. *Physical Review E*, 97(4):042126, 2018

Talks and Posters

- 11. Poster, 3D structures of chiral membranes with free edges. Physics Department Poster Session. Flatiron Institute(May. 2022)
- Seminar talks, Shapes and orientational order of colloidal membrane. Oak Ridge National Laboratories (Apr. 2022), Johns Hopkins University (Apr. 2022), Instituto Gulbenkian de Ciência (Apr. 2022), Merck (Mar. 2022), Rice University (Feb. 2022), Sandia National Laboratories (Dec. 2021)
- 9. Contributed talk, Three-dimensional structures of chiral membrane with edges, APS March Meeting, Session on Membranes, Micelles and Vesicles. Chicago (Mar. 2022)
- 8. Soundbite, 3D structures of chiral membrane with edges. 89th New England Complex Fluids Meeting. Harvard University (Dec. 2021)
- 7. Poster, 3D structures of chiral membranes with free edges. Physics Department Poster Session. Brown University(Nov. 2021)

- 6. Contributed talk, Chiral membranes with orientational order and free edges, APS March Meeting, Session on Membranes, Micelles and Vesicles. Online (Mar. 2021)
- 5. Soundbite, Membranes with orientational order and free edges. 86th New England Complex Fluids Meeting. Online (Mar. 2021)
- 4. Poster, Membranes with orientational order and free edges. Physics Department Poster Session. Brown University(Nov. 2020)
- 3. Soundbite, Shapes of fluid membrane with chiral edges. 81st New England Complex Fluids Meeting. Harvard University (Dec. 2019)
- 2. Poster, Shapes of fluid membrane with chiral edges. Physics Department Poster Session. Brown University (Nov. 2019)
- 1. Poster, Membranes with edges. Materials Research Science and Engineering Centers Retreat. Brandeis University (Nov. 2018)

Experience

| 2018-present | Research Assistant, Brown University |
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| 2017-2018 | Teaching Assistant (Basic Physics A, B), Brown University |
| 2016 | Teaching Assistant (Mechanics and Thermal Physics), USTC |

Awards and Honors

- 2021 Physics Dissertation Fellowship, Brown University, U.S.
- 2016 National Scholarship, Ministry of Education, China
- 2015 Grand Prize, China Undergraduate Physics Tournament, China
- 2015 National Scholarship, Ministry of Education, China
- 2012 Bronze Medal, Chinese Physics Olympiad, China

VITA Prepared May 16, 2022