

# CURRICULUM VITAE

## Lijie Ding

Spallation Neutron Scattering Division,  
Oak Ridge National Laboratory  
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## Professional Experience

2024/05-present    Postdoctoral Research Associate, Oak Ridge National Laboratory  
2023/01-2024/05    Vice President, Quantitative Strategist, Goldman Sachs  
2022/06-2022/12    Associate, Quantitative Strategist, Goldman Sachs

## Education

2017/09-2022/06    Ph.D. (Physics), Brown University  
Dissertation: Chiral Liquid Crystal on Deformable Surfaces: A Monte Carlo Study  
Advisor: Robert A. Pelcovits and Thomas R. Powers  
  
2013/09-2017/06    B.Sc. (Applied Physics), University of Science and Technology of China  
Thesis: Irreversible Monte Carlo Algorithms  
Advisor: Youjin Deng

## Publications

5. Lijie Ding, Robert A Pelcovits, and Thomas R Powers. Chiral fluid membranes with orientational order and multiple edges. *Soft Matter*, 19(43):8453–8464, 2023
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, Abraham Nasrawi, Timothy M Garoni, and Youjin Deng. Lifted worm algorithm for the Ising model. *Physical Review E*, 97(4):042126, 2018

## Talks and Posters

12. Soundbite, Characterizing structure of ladder polymer using machine learning assisted scattering data analysis. Brown University (Jun. 2024)
11. Poster, 3D structures of chiral membranes with free edges. Mechanics of Life workshop, Flatiron Institute (May. 2022)

10. 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  
 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