

# Jiming Zheng

*Place of birth:* Xiangyang, Hubei, China  $\diamond$  *Date of birth:* 09-11-2001  $\diamond$  *Gender:* Male

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## Higher Education

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### Graduate student in Physical Chemistry

University of North Carolina at Chapel Hill

Supervisor: Zhiyue Lu

August 2023 - Current

### Visiting student in Physics (CTBP)

Rice University

Supervisor: Evelyn Tang

August 2022 - December 2022

### B.S. in Chemical Physics

University of Science and Technology of China

Supervisor: Zhonghuai Hou

August 2019 - July 2023

## Preprints

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\* denotes co-first author

1. “Stochastic Distinguishability of Markovian Trajectories”  
Asawari Pagare\*, Zhongmin Zhang\*, **Jiming Zheng\***, Zhiyue Lu  
arXiv: 2401.16544 (2024)

## Refereed Papers

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\* denotes co-first author

3. “Designing autonomous Maxwell’s demon via stochastic resetting”  
Ruicheng Bao\*, Zhiyu Cao\*, **Jiming Zheng\***, Zhonghuai Hou  
*Phys. Rev. Research* **5**, 043066 (2023)
2. “Combining Infrared Spectroscopy Experiment with Quantum Chemical Calculations to Study Hydrogen Bond in Several Aliphatic Alcohol and CCl<sub>4</sub> Solutions”  
Yu Liu, **Jiming Zheng**, Nayan Zongchen, Hong Wu, Wanqun Hu  
*University Chemistry* **38**(8): 216-224 (2023)
1. “Fast Functionalization with High Performance in the Autonomous Information Engine”  
Zhiyu Cao\*, Ruicheng Bao\*, **Jiming Zheng**, Zhonghuai Hou  
*J. Phys. Chem. Lett.* **14**, 66 (2022)

## Presentations

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1. Contributed talk, “Cabirate time with arbitrary Markov process”  
125th Statistical Mechanics Conference  
Rutgers University, New Brunswick, USA, December 17 - 19, 2023

## Honors and Awards

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5. Level-A USTC Fellowship for Undergraduate Students  
USTC, Hefei, China, May, 2023
4. Weirui Cup Chemistry Innovation Competition - First Prize  
Wuhan, China, July, 2022

3. Lu Jiayi Talent Program Scholarship  
USTC, Hefei, China, November, 2020-2021
2. Outstanding student scholarships  
USTC, Hefei, China, October, 2020-2022
1. Outstanding Freshman Scholarship - Gold Award  
USTC, Hefei, China, October, 2019

### *Technical Skills*

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<b>Programming Language</b>	Python, Mathematica
<b>Tool/Software</b>	L <sup>A</sup> T <sub>E</sub> X, Adobe Illustrator, Affinity Designer 2, Inkscape, Blender, Gaussian, Amber

### *Language Proficiencies*

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<b>Chinese</b>	Native speaker
<b>English</b>	Fluent