

# LYU LIYAO

## 吕力遥

### PERSONAL DATA

---

NAME: 吕力遥 (Lyu Liyao)  
ADDRESS: School of Mathematical Sciences  
Soochow University, P.R. China  
PHONE: +86 18015416145  
EMAIL: lyuliyao[at]msu[DOT]edu  
WEBSITE: lyuliyao.github.io

### EDUCATION EXPERIENCE

---

Sept. 2016 - Present	<i>Soochow University, Suzhou, China</i> <b>Bachelor of Science(BS): Mathematics</b> Grade Point Average (GPA): 3.7/4.0 (Rank: Top 20%)
Jan. 2019 - May. 2019	<i>University of California Berkeley, CA, USA</i> Exchange Student
Sep. 2020 - Present	<i>Michigan State University, MI, USA</i> Phd Student

### RESEARCH EXPERIENCE

---

Aug. 2019 - Nov. 2019	<i>University of Massachusetts Dartmouth, MA, USA</i> Advised by Mathematical Science Professor Dr. Zheng Chen <b>Local Discontinuous Galerkin Method for Fractional Diffusion Equation</b>
Jul. 2019 - Aug. 2019	<i>Hong Kong University of Science and Technology, HK, China</i> Advised by Mathematical Sciences Professor Dr. Yang Xiang
March. 2018 - March. 2020	<i>Soochow University, Suzhou, China</i> Advised by Mathematical Sciences Professor Dr. Jingrun Chen <b>Estimate the Exciton Diffusion Length of Organic Semiconductors</b> Funded By: Undergraduate Training Program for Innovation and Entrepreneurship, Soochow University

## LEADERSHIP EXPERIENCES AND ACTIVITIES

---

Jul. 2018 - Jul. 2019	<p>Soochow University, CW Chu College, Suzhou, China</p> <p>President of Students' Association for Science and Technology</p> <p>Organized approximately 50 oral defenses annually for undergraduates' research projects in the college</p> <p>Organized technical culture festival with over four hundred undergraduates and some local citizens participate</p> <p>Awarded with outstanding Students' Association for Science and Technology during the period.</p>
-----------------------	---

## SCHOLARSHIPS AND CERTIFICATES

---

2018	Outstanding Leadership Scholarship
2018	Second Prize in Contemporary University Mathematical Contest in Modeling (top 3%)
2017	Third Prize in Chinese Mathematics Competitions
2017	Academic Excellence Award (top 10%)
2016	Second Prize in Freshmen Debate Competition

## PUBLICATION

---

**Liyao Lyu**, Zheng Chen.2020. "Local discontinuous Galerkin methods with novel basis for fractional diffusion equations with non-smooth solutions." Communications on Applied Mathematics and Computation. 10.1007/s42967-020-00104-3

Shi Jin, Jingrun Chen, **Liyao Lyu**.2020."A consensus-based global optimization method with adaptive momentum estimation" Arxiv.

**Liyao Lyu**, Zheng Chen.2020."Local discontinuous Galerkin methods with novel basis for fractional diffusion equations with non-smooth solutions". 2020. Communications on Applied Mathematics and Computation.

**Liyao Lyu**, Keke Wu, Rui Du\*, Jingrun Chen\*.2020. "Enforcing exact boundary and initial conditions in the deep mixed residual method." Arxiv.

**Liyao Lyu**, Zhen Zhang , Minxin Chen\*, Jingrun Chen\*. 2020. "MIM: A deep mixed residual method for solving high-order partial differential equations." Arxiv.

Chen, Jingrun, Rui Du, Panchi Li, and **Liyao Lyu** . 2020. "Quasi-Monte Carlo sampling for machine-learning partial differential equations" Numerical Mathematics Theory Methods and Applications.

**Liyao Lyu** , Zhiwen Zhang\*, and Jingrun Chen\*. 2020. "A Qmc-Deep Learning Method for Diffusivity Estimation in Random Domains." Numerical Mathematics Theory Methods and Applications.