

Pei Ge

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Education Experience

- **Ph.D.**

The Department of Computational Mathematics, Science and Engineering

Michigan State University, Michigan, USA

Advisor: Dr. Huan Lei

Jan. 2020 - Present

- **B.S. Applied Mathematics**

School of Mathematics

Southeast University, Jiangsu, China

Sep. 2015 - July. 2019

Teaching Experience

- **Teaching Assistant**

CMSE 201 - Introduction to Computational Modeling, Fall 2024

Michigan State University, Michigan, USA

Invited Talks

- **DeePN²: A deep learning-based non-Newtonian hydrodynamic model**

The NSF Computational Mathematics PI Meeting, Seattle (Poster), WA, USA

Jul 2024

Scale Bridging Meeting and Workshop (Poster), Los Alamos, NM, USA

Apr 2024

- **Data-driven Learning of Generalized Langevin Equations with State-dependent Memory**

SIAM New York-New Jersey-Pennsylvania Section (SIAM-NNP), NJ, USA

Oct 2023

Publications

- [4] Pei Ge, Zhongqiang Zhang, and Huan Lei. Data-driven learning of the generalized langevin equation with state-dependent memory. *Phys. Rev. Lett.*, 133:077301, Aug 2024
- [3] Zhiyuan She, Pei Ge, and Huan Lei. Data-driven construction of stochastic reduced dynamics encoded with non-markovian features. *The Journal of Chemical Physics*, 158(3):034102, 2023
- [2] Pei Ge, Linfeng Zhang, and Huan Lei. Machine learning assisted coarse-grained molecular dynamics modeling of meso-scale interfacial fluids. *The Journal of Chemical Physics*, 158(6), 02 2023. 064104
- [1] Lidong Fang, Pei Ge, Lei Zhang, Weinan E, and Huan Lei. DeePN²: A deep learning-based non-newtonian hydrodynamic model. *Journal of Machine Learning*, 1(1):114–140, 2022