Yan Huang

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Research Interests Numerical Methods for Kinetic Equations, Gradient Flows, Optimal Transport, Deep Learning, Scientific Machine Learning.

Education

University of Minnesota Twin Cities

Minneapolis, MN, USA Aug. 2023 -

Southern University of Science and Technology B.S. in Mathematics and Applied Mathematics

Shenzhen, China Aug. 2019 - Jun. 2023

Honors Program in Mathematics

Ph.D. in Mathematics

Publications

[1] Y. Huang, L. Wang, A score-based particle method for homogeneous Landau equation, submitted, https://arxiv.org/abs/2405.05187.

Research Projects **Acceleration of Variable Frequency Fourier Transform** Summer 2022 Developed an acceleration algorithm for computing variable frequency Fourier trans-

form with Prof. Zhen Zhang at SUSTech.

Conference Attending

- PDEs of incompressible fluid flows, computer assisted proofs and neural networks, UMN, Apr. 12, 2024.
- Computational Challenge and Optimization in Kinetic Plasma Physics, IMSI, Feb. 19-22, 2024.
- New Trends in Kinetic and Optimal Transport, UMN, Oct. 25-27, 2023.

Teaching

School of Mathematics, UMN

• Teaching Assistant, MATH 1272 Calculus II

Spring 2024

• Teaching Assistant, MATH 1271 Calculus I

Fall 2023

Department of Mathematics, SUSTech

• Grader, MA327 Differential Geometry

Spring 2022

Awards

- SUSTech Excellent Undergraduate Thesis.
- SUSTech Second Class of the Merit Student Scholarship, 2021 & 2022.
- \bullet First Class Award of the 13^{th} National College Students Mathematics Competition.

Skills

Programming: Python, PyTorch, Matlab, Java.

Language: Chinese (native), English (professional).