

# CURRICULUM VITA

## Dixi Wang

University of Florida  
Department of Mathematics  
Little Hall 358,  
Gainesville, FL 32603

Phone: (425) 499-1173  
Email: [dixiwang@ufl.edu](mailto:dixiwang@ufl.edu)

### EDUCATION

- 08/2019 – graduating *Ph.D. in Mathematics*  
05/2024 University of Florida, Gainesville, Florida  
Advisor: Cheng Yu  
Fields: Partial Differential Equations, Fluid Dynamics,  
Mathematical Theory of Deep learning  
Dissertation: “Vanishing Viscosity Limit and Learning Operators of  
Weak Solutions to the Navier-Stokes Equations”
- 09/2017-07/2019 *M.Phil. in Mathematics*  
The Chinese University of Hong Kong, Hong Kong, China  
Advisor: Renjun Duan  
Fields: Partial Differential Equations, Kinetic Theory
- 08/2013-07/2017 *B.S. in Mathematics, Computational and Applied Mathematics Stream*  
The Chinese University of Hong Kong, Hong Kong, China

### RESEARCH INTERESTS

Nonlinear Partial Differential Equations, Fluid Dynamics,  
Mathematical Foundations of Deep Learning, Statistical Learning Theory.

### PUBLICATIONS AND PREPRINTS

- **Wang, D.**, and Yu, C. “*Deep learning techniques for identifying weak solutions to the Navier-Stokes equations*”, preprint, 2023.
- **Wang, D.**, Yu, C., and Zhao, X., “*Inviscid limit of the inhomogeneous incompressible Navier-Stokes equations under the weak Kolmogorov hypothesis in  $\mathbb{R}^3$* ”, Dyn. Partial Differ. Equ. 19 (2022), no. 3, 191–206.

## **AWARDS AND FELLOWSHIPS**

- *Eleanor Ewing Ehrlich in Teaching Award*, University of Florida, 2022
- *Graduate School Fellowship*, University of Florida, 2019-2022
- *Undergraduate Full Scholarship*, The Chinese University of Hong Kong, 2013-2017

## **PRESENTATIONS**

- PDE seminar, The Chinese University of Hong Kong, June 2023.
- *Workshop on Nonlinear PDEs: Stability Analysis and Multiscale Applications*, University of Pittsburgh, 21-23 April 2023.

## **TEACHING EXPERIENCE**

### **University of Florida**

Teaching Assistant, Fall 2019 – Fall 2023

Courses: Calculus 1, 2 and 3, Computational Linear Algebra

### **The Chinese University of Hong Kong**

Instructor, Summer 2018

Course: Ordinary Differential Equations

Teaching Assistant, Fall 2017 – Spring 2019

Courses: Calculus 1 and 2, Linear Algebra, Probability

## **TECHNICAL SKILLS**

**Programming Languages:** Python, MATLAB

**Tech Stack and Tools:** PyTorch, TensorFlow