Runzhang Zhong

Vanderbilt University
Department of Mathematics
runzhang.zhong@vanderbilt.edu

Research Interests

Partial Differential Equations, Fluid Mechanics.

Education

Vanderbilt University
Ph.D. in Mathematics, 2019 – 2025
Advisor: Marcelo Disconzi
Thesis: *The Israel-Stewart Free boundary Problem*
University of Minnesota, Twin Cities
B.S. in Mathematics, 2016 – 2019

Research

- The Linearized Israel-Stewart Equations with a Physical Vacuum Boundary (arXiv:2411.00291)

- The Israel-Stewart Equations in a Physical Vacuum. (In preparation.)

- The Relativistic Euler Equations with a Physical Vacuum Boundary and an Ideal Gas Equation of State. (In preparation.)

Teaching Experience

Vanderbilt University

- Teaching Assistant, Math 2400 Differential Equations with Linear Algebra (Fall 2024)

- Teaching Assistant, Math 1201 Single-variable Calc II (Spring 2023, Spring 2021)

- Teaching Assistant, Math 1200 Single-variable Calc I (Fall 2022, Summer 2021)

- Teaching Assistant, Math 1301 Accelerated Single-variable Calc II (Spring 2022)

- Teaching Assistant, Math 1300 Accelerated Single-variable Calc I (Fall 2022)

- Teaching Assistant, Intro Prob/Math Stats (Fall 2020)

Conference Attended

- April 22-23, 2023. 7th KUMUNU-ISU Conference in PDE, Dynamical Systems and Applications.

- March 18-19, 2023. Ohio River Analysis Meeting 12.

- Jan 16-20, 2023. Workshop on Geometry and Analysis of Fluid Flows.

- April 2-3, 2022. Ohio River Analysis Meeting 11.