

# Jishen Du

jd1422@scarletmail.rutgers.edu

## EDUCATION

**Rutgers, The State University of New Jersey**

Ph.D., Mathematics | Advisor: Yi-Zhi Huang

New Jersey, the United States

09/2021 - Present

**Beijing Normal University**

B.S., Mathematics

one-year study in Physics

Beijing, China

09/2017 - 07/2021

09/2016 - 07/2017

## PUBLICATIONS

1. **J. Du**, Y-Z. Huang, Twisted intertwining operators and tensor products of (generalized) twisted modules, arXiv:2501.15003. (Under review)
2. Ph.D. thesis. Twisted intertwining operator, tensor product of twisted modules, and their associativity. (in progress)

## TALKS

**Towards  $G$ -crossed braided tensor category: twisted intertwining operators,  $P(z)$ -compatibility, and associativity of intertwining operators**

10/19/2024

AMS Sectional Meeting, Special Session on Recent Advances in Vertex Operator Algebras

University at Albany

**Towards  $G$ -crossed braided tensor category: skew symmetry**

06/25/2024

**isomorphism,  $P(z)$ -compatibility, and associativity of intertwining operators**

Vertex Algebra, Tensor Category and Related Topics

Shanghai Jiaotong University

**Twisted intertwining operators and tensor products of (generalized) twisted modules**

04/26/2024

Lie Group/Quantum Mathematics Seminar

Rutgers University

**Integrable Highest Weight Modules, and Weyl-Kac Character Formula**

10/13/2023

Graduate Algebra and Representation Theory Seminar

Rutgers University

**A brief intro to BGG category and BGG resolution**

03/21/2022

Graduate Algebra and Representation Theory Seminar

Rutgers University

## TEACHING EXPERIENCES

### — Instructor —

**Math 252: Elementary Differential Equations**

Rutgers University, Summer 2023

**Math 250: Introductory Linear Algebra**

Rutgers University, Summer 2025

### — Teaching Assistant —

Math 251: Multivariable Calculus

Rutgers University, Fall 2025

Math 252: Elementary Differential Equations (TA at large)

Rutgers University, Spring 2025

Math 135: Calculus I for the Life and Social Sciences

Rutgers University, Fall 2024

Math 481: Mathematical Theory of Statistics (TA at large)

Rutgers University, Spring 2024

Math 151: Calculus I for the Mathematical and Physical Sciences

Rutgers University, Fall 2023

Math 152: Calculus II for the Mathematical and Physical Sciences

Rutgers University, Spring 2023

Math 251: Multivariable Calculus

Rutgers University, Fall 2022

### — Mentor —

**Basic  $\infty$ -category theory**

Direct Reading Program, Rutgers University, Summer 2024