# BOJUE WANG

bw391@math.rutgers.edu bw2391@princeton.edu

#### **EDUCATION**

Rutgers University—New Brunswick Piscataway, NJ
Ph.D. Candidate in Mathematics Aug 2021 - Present

Research Interest: Algebraic GeometryCurrent Project: Fake Projective Planes

• Advisor: Lev Borisov

Stevens Institute of TechnologyHoboken, NJM.S. in MathematicsAug 2020 - Aug 2021M.S. in PhysicsAug 2018 - May 2020Tongji UniversityShanghai, ChinaB.S. in Applied PhysicsSep 2013 - Jun 2017

#### AWARDS AND GRANTS

Summer Research GrantsJuly 2024Rutgers UniversityPiscataway, NJProfessor Leel Laborrita's denotion

Professor Joel Lebowitz's donation

Summer Research GrantSummer 2021Stevens Institute of TechnologyHoboken, NJ

Professor Rizos Sklinos' grant

FellowshipFall 2018Stevens Institute of TechnologyHoboken, NJ

Provost Masters Fellowship Awards

#### RESEARCH AND PUBLICATIONS

G-PASTA: GPU Accelerated Partitioning Algorithm for Static Timing Analysis 2024

Master's Thesis—Hyperbolic Groups
Stevens Institute of Technology

Jan 2021 – May 2022
Hoboken, NJ

Advisor: Rizos Sklinos

#### ACADEMIC EXPERIENCE

### Rutgers University—New Brunswick

Hodge Theory Learning Group

Spring 2024

In the course Math 535 Algebraic Geometry I, spring 2024, by Prof. Borisov, we are grouped to study Hodge Theory. Finally, we made a presented lecture for which I involved the definition, examples of Hodge Structure, and how to produce Hodge Structures from what we were given.

Lie Algebra Learning Group

Spring 2023

Semiweekly Learning meeting with a junior and a first-year Ph.D. student under the supervision of Prof. Siddhartha Sahi with text *Introduction to Lie Algebras and Representation Theory*, *Humphreys* 

Complex Analysis Learning Seminar

Fall 2022

Weekly learning seminar under the supervision of Prof. Xiaojun Huang with notes Topics in One Complex Variable

ODEs Directed Reading Course

Fall 2022

Study of numerical and theoretical ODEs under the supervision of Prof. Konstantin Mischaikow with his unpublished book, *Ordinary Differential Equations: A Constructive Approach*, along with a project of problem-solving for completing the book

Commutative Algebra Directed Reading

Fall 2022

Weekly meeting with two senior students and independent study under the supervision of Prof. Anders Buch with text *Commutative Algebra*, *Eisenbud* 

Real Analysis Reviewing

Summer 2022

Weekly meeting with Prof. Micheal Beals in reading the text *Real and Complex Analysis*, *Walter Rudin* and discussing some written qualifying exam problems at Rutgers University in real analysis part

Algebra Directed Reading

Spring 2022

Weekly discussion and independent study under the supervision of Prof. Lev Borisov with text  $Abstract\ Algebra,\ Dummit\ and\ Foote$ 

## PROFESSIONAL APPOINTMENT

Princeton University	Princeton, NJ
Instructor, Junior Summer Institute program SPI600C—Advanced Statistics	Summer 2024
Rutgers University—New Brunswick Instructor, Summer session	$Piscataway,\ NJ$
135—Calculus I	Summer 2024 Summer 2023
250—Intro Linear Algebra	
Instructor, Rutgers Young Scholars program General Mathematics Background	Summer 2024
Teaching Assistant	G : 2024
351—Intro Abstract Algebra I	Spring 2024
252—Elementary Differential Equations 311—Intro Real Analysis I	Fall 2023 Spring 2023
244—Differential Equations	Spring 2023
250—Intro Linear Algebra	Fall 2022, Spring 2023
135—Calculus I	Fall 2022
Grader	
552—Abstract Algebra II	Spring 2024
350H—Linear Algebra	Spring 2024
311—Intro Real Analysis I	Spring 2024 Fall 2023
551—Abstract Algebra I 527—Applied Math I	Fall 2023
373—Numerical Analysis I	Summer 2023
528—Applied Math II	Spring 2023
550—Linear Algebra	Fall 2022
321—Intro Applied Math	Fall 2022
292H—Calculus IV	Spring 2022
Mentor, Directed Reading program	
Trisha Kothavale: Clifford Algebra	Spring 2024
Peter Zhao: Topology	Spring 2023
Mark Vaysiberg: Smooth Manifold	Summer 2022
Stevens Institute of Technology Teaching Assistant	Hoboken, NJ
570—Analysis Review	Fall 2021
573—Linear Algebra Review	Spring, Summer, Fall 2021

## **PRESENTATIONS**

## Pizza Seminar

Feb 18, 2022

Rutgers University—New Brunswick Piscataway, NJ
Geodesic Metric Spaces and Four Equivalent Properties of Geodesic Triangles

## REFERENCE

Prof. Robert Michael Beals <br/> <br/>beals@rutgers.edu>

Prof. Liping Liu liu.liping@rutgers.edu>

Mr. Ariel Matos <ariel.matos@princeton.edu.>