# Qianshu Huang

Email: qshuang@whu.edu.cn; Phone: +86 13536033443 NO.3 Meiyuan Dormitory, Wuhan University

## **EDUCATION BACKGROUND**

## Wuhan University (WHU), Wuhan, China

09/2020-(expected graduation in 06/2024)

Mathematics and Statistics College, pure mathematics (Hongyi Honor Program)

GPA: 3.91/4.00 (majored) 3.74/4.00 (general)

Courses: Functional Analysis, Differential Geometry, Probability Theory, Real Analysis, Complex Analysis, Topology, Harmonic Analysis, Abstract Algebra, Commutative Algebra, Ordinary Differential Equations, Linear algebra, Basic Analysis

#### University of California, Berkeley, Berkeley, CA, United States

01/2023-08/2023

Berkeley Global Access (International exchange program)

GPA: 4.00/4.00

Courses: MATH 250B Commutative Algebra, A+

MATH 208 C\*-algebra, A

MATH 126 Partial Differential Equations, A+

#### ACADEMIC INTEREST

Geometry and Topology; Operator Algebra; Functional Analysis

#### RESEARCH EXPERIENCE

# Enflo problem

Wuhan University 09/2023-11/2023

- Guided by Prof. Yanqi Qiu;
- Conducted an in-depth study of the Enflo problem, focusing on the paper *The Rademacher type and Enflo type coincide* [Annals of Mathematics 192 (2020)] and other related works by Pisier, Talagrand, and Naor;
- Learned the content and achievement of the Ribe Program through Naor's paper *An introduction to the Ribe program*;
- Delivered 2 presentations and reports on the Enflo Problem to study groups, including instructor and graduate students.

## C\*-Algebra and K-Theory

UC Berkeley 06/2023-07/2023

- Guided by Prof. Marc A. Rieffel;
- Delving into the realms of  $K_0$  group through projections by using Wegge-Olsen's textbook  $C^*$ -Algebra and K-Theory;
- Studied the basic algebraic  $K_0$  group and its properties for some special ring from the first chapter of John Milnor's textbook *Introduction to Algebraic K-Theory*;
- Studied a mini lecture course Directed graphs, variations on directed graphs, and their C\*-algebras by Jack Spielberg.

#### **SEMINAR**

## Algebraic Topology

Wuhan University Fall 2022

• Gave a report on the calculation of the homology group of some classic simplicial complexes.

#### Fourier Analysis

Wuhan University Spring 2022

- Read and finished the exercises of the first five chapters of Stein's Fourier analysis.
- Delivered a lecture about the classic Fourier transform over real numbers.

# Hongyi Academic Seminar

Wuhan University 2021-2022

Discussed difficult exercises encountered in the textbook and gave a lecture to share new knowledge weekly.

# TEACHING EXPERIENCE

#### Mentor, Wuhan University

Wuhan University 2021-2022

- Provided one-on-one assistance to lower-class students in solving problems related to abstract algebra, basic analysis and real analysis.
- Guided them on effective learning strategies in mathematics.

#### HONORS & AWARDS

HONORS & HWIRDS		
<b>*</b>	First-Class Luojia Outstanding Exchange Scholarship, Wuhan University	11/2023
•	Third-Class Scholarship for Outstanding Students, Wuhan University	10/2022
•	Third-Class Scholarship for Outstanding Students of Hongyi Honor College	10/2022
•	Outstanding Student Award, Wuhan University	12/2021
•	Third-Class Scholarship for Outstanding Students, Wuhan University	12/2021
•	First-Class Scholarship for Freshmen (top 5%), Wuhan University	12/2020