Curriculum Vitae
Binhe Huang

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Education

South China University of Technology, BS in Mathematics   Sept 2020 - June 2024
- GPA: 90.07/100
- Coursework: Linear Algebras, Analysis, Advance Modern Algebras

Southern University of Science and Technology, MSc in Mathematics   Sept 2024 – present
- Supervisor: Vyacheslav Futorny
- GPA: 3.75/4.0
- Coursework: Algebraic Curves, Topics in Algebra, Abstract Algebra II, Algebraic Geometry, Combinatorics

Research Interests

Representation theory of Lie algebras, Quantum groups, Kac-Moody Lie algebras

Personal Reading

- Introduction to Quantum Groups (G. Lusztig)   July 2025 - present
- Representations of Semisimple Lie Algebras in the BGG Category $\mathcal{O}$ (J. E. Humphreys)   Oct 2024 - present
- Introduction to Lie Algebras and Representation Theory (J. E. Humphreys)   Nov 2023 - Nov 2024

Projects

- **Preprint:** *Highest weight modules of simple Lie superalgebras in characteristic 2*, B. Huang, S. Bouarroudj, Q. Ehret, J. A. Ramírez-Bermúdez   Mar 2025 - present
- **Master thesis**: *A survey of quantum groups and $\imath$quantum groups.*   July 2025 - present

Teaching Activities

- Exercise Class of Advanced Linear Algebra I, MA107   Sept 2024 - Jan 2025
- Exercise Class of Advanced Linear Algebra II, MA111   Feb 2025 - June 2025

Technologies

- Languages: Chinese (native), English (IELTS: 6.5/9 in 2024), Cantonese (listening and speaking)
- Skills: LaTeX, Python

Conferences (attended)

2024:
- Sichuan University, Workshop of Algebraic, analysis, geometric structures emerging from quantum field theory, March 1-15
- Guangzhou University, Workshop of Lie theory and related topic in 2024, April 26 - May 1
- SICM, Non-Associative Algebras, Representations and Applications, November 17-23

2025:
- SICM, Shenzhen Thematic Program "Representation Theory": Quantum Groups, March 23-27
- SICM, Shenzhen Thematic Program "Representation Theory": Vertex Algebras, April 20-26

- SICM, Shenzhen Thematic Program "Representation Theory": Lie Algebras, May 25-31
- Nankai University, Workshop on algebras and applications in mathematical physics, June 29 - July 2

Scholarship

Special Scholarship for Postgraduate Students	2025

References

Chair Professor Vyacheslav Futorny	vfutorny@gmail.com
Professor Iryna Kashuba	ikashuba@gmail.com
Southern University of Science and Technology	https://www.sustech.edu.cn/
SUSTech International Center of Mathematics	https://icm.sustech.edu.cn/