

Curriculum Vitae

Binhe Huang

Shenzhen, China | huangtongxue101@gmail.com | +86 15874099320 | <https://huangbinhe101.github.io/>

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: <i>Highest weight modules of simple Lie superalgebras in characteristic 2</i> , B. Huang, S. Bouarroudj, Q. Ehret, J. A. Ramírez-Bermúdez	Mar 2025 - present
• Master thesis: <i>A survey of quantum groups and iquantum groups.</i>	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
• SCUT, 2025 SCUT workshop on Lie theory, April 18-21

- 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
Professor Sofiane Bouarroudj	sofiane.bouarroudj@nyu.edu
Southern University of Science and Technology	https://www.sustech.edu.cn/
SUSTech International Center of Mathematics	https://icm.sustech.edu.cn/