Curriculum Vitae

Personal information

Name: Jiepeng Fang

Date of birth: 1994.12.07

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Education experience

B.S. 2013-2017 Department of Mathematics, Nanjing University

Ph.D. 2017-2022 Department of Mathematical Sciences, Tsinghua University

Supervisor: Professor Jie Xiao

Thesis: Categorifical and geometric construction of infinite dimensional Lie algebra and quantized enveloping algebra

Working experience

Postdoc. 2022-2024 School of Mathematical Sciences, Peking University

Supervisor: Professor Huijun Fan

Postdoc. 2024-now Department of Mathematics, The University of Hong Kong

Supervisor: Professor Xuhua He

Research interest

Representation theory: quiver representation, Lie algebra, Hall algebra, quantum group, Lusztig's perverse sheaf theory for canonical basis

Publication

1. J. Fang, Y. Lan and J. Xiao. The parity of Lusztig's restriction functor and Green's formula. *J. Algebra,* 618:67-95, 2023.
2. J. Fang, Y. Lan and J. Xiao. Lie algebras arising from two-periodic projective complex and derived categories. *Adv. Math,* 456:109903, 2024.
3. J. Fang, Y. Lan and Y. Wu. The parity of Lusztig's restriction functor and Green's formula for a quiver with automorphism. *Algebr. Represent. Theory, 2025.*

Preprint

1. J. Fang, Y. Lan and J. Xiao. The correspondence between the canonical and semicanonical bases. *arXiv:2210.16758*, 2022.
2. J. Fang, Y. Lan and J. Xiao. Sheaf realization of Bridgeland's Hall algebra of Dynkin type. *arXiv:2303.04993*, 2023.
3. J. Fang, Y. Lan and J. Xiao. Lie algebras arising from two-periodic projective complex and derived categories. *arXiv: 2305.06664*, 2023.

4. J. Fang, Y. Lan and J. Xiao. Lusztig sheaves and integrable highest weight modules. *arXiv: 2307.16131*, 2023.

5. J. Fang and Y. Lan. Lusztig sheaves and tensor products of integrable highest weight modules. *arXiv: 2310.18682, 2023.*

6. J. Fang. On singular support of Lusztig's perverse sheaves. arXiv:2401.02770, 2024

7. J. Fang and Y. Lan. Lusztig sheaves, characteristic cycles and the Borel-Moore homology of Nakajima's quiver varieties. *arXiv:2501.12047,* 2025.