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Education

• Ph.D in Mathematics, UC Berkeley, 2018.
Advisors: Vivek Shende, and Richard E. Borcherds.
• B.S. in Mathematics and Physics, Tsinghua University, China, 2012.
Fellowship in the Tsinghua Xuetang Talents Program.

Employment

• Postdoc, YMSC, Beijing, Jan. 1, 2021-present.
(supported by the International Postdoctoral Exchange Fellowship (Talent-Introduction Program))
• Postdoc, École Normale Supérieure - CNRS, Paris, Sept. 1, 2018 - Aug. 31, 2020.
(supported by the ANR Microlocal Project)

Visits

• Sep. 01-Nov. 25, 2020, IHES, Paris, France.
• Jul. 28-Aug. 4, 2019, IBS-CGP, South Korea.
• Jun. 8-30, 2019, CRM, Montreal, Canada.
• Nov. 25-Dec. 9, 2018, RIMS, Kyoto, Japan.
• Oct. 4-6, 2018, Fourier Institute, Grenoble, France.

Research Interests

• Microlocal sheaf theory and Legendrian knots, Hodge theory of character varieties, mirror symmetry.

Papers

• Dual boundary complexes of Betti moduli spaces over the two sphere with one irregular singularity, arXiv:2109.01645. Submitted.
• Augmentations are sheaves for Legendrian graphs, with Byung Hee An, Youngjin Bae, arXiv:1912.10782. (to appear in Journal of Symplectic Geometry)
• Augmentations and ruling polynomials for Legendrian graphs, with Byung Hee An, Youngjin Bae, arXiv:1911.11563. (to appear in Algebraic & Geometric Topology)
• A Hodge-theoretic study of augmentation varieties associated to Legendrian knots/tangles, Ph.D thesis, ProQuest 2018.
• Ruling polynomials and augmentations for Legendrian tangles, arXiv:1707.04948. (essentially incorporated in my thesis)

Research Talks

- Dec. 17, 2021, Tsinghua Algebraic Geometry workshop, YMSC, Beijing (to appear).
- Dec. 14, 2021, Symplectic Geometry and Mathematical Physics seminar, BICMR, Beijing (to appear).
- Nov. 29, 2021, GeoTop seminar, YMSC, Beijing.
- Nov. 10, 2021, Geometry and Topology seminar, Academy of Mathematics and Systems Science, CAS, Beijing.
- Oct. 12-13, 2021, Geometry and Topology seminar, Chern Institute of Mathematics, Tianjin.
- Sep. 24, 2021, Geometric representation seminar, YMSC, Beijing.
- Mar. 24, 2021, Zoom talk, Moscow-Beijing topology seminar.
- Jul. 31, 2019, Director's seminar, IBS-CGP, South Korea.
- Jun. 27, 2019, Conference on Homological algebra, Microlocal analysis, and Symplectic geometry, CRM, Montreal.
- Jan. 19, 2019, Conference on Number theory, Algebra, Combinatorics, IAS of HIT, Haerbin, China.
- Nov. 30, 2018, Symplectic seminar, RIMS, Kyoto.
- Nov. 9, 2018, Symplectic seminar, ENS, Paris.
- Oct. 5, 2018, Topology seminar, Fourier Institute, Grenoble.
- May 24, 2018, Student geometry/topology seminar, UC Davis.
- Mar. 6, 2018, EGN postdoc and student seminar, MSRI.
- Dec. 5, 2017, 3-manifold Seminar, UC Berkeley.
- Jun. 28, 2017, AIM square meeting "Sheaf theory and Legendrian knots", San Jose.

Teaching

- Geometric representation theory II, TA, Fall 2021, Tsinghua university.
- Math 113, Introduction to Abstract Algebra, TA, Spring 2018, UC Berkeley.
- Math 16B, Analytic Geometry and Calculus, TA, Spring 2014, Fall 2015, Spring 2016, Fall 2016, Fall 2017, UC Berkeley.
- Math 54, Linear Algebra and Differential Equations, TA, Fall 2014, Spring 2015, UC Berkeley.
- Math 1B, Calculus, TA, Fall 2013, UC Berkeley.

Services

- Derived Algebraic Geometry learning seminar, YMSC, Spring 2021.
- Referee for: Symmetry, Integrality and Geometry: Methods and Applications.