Bingyu ZHANG 张秉宇

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Positions

University of Southern Denmark (SDU)   **Odense, Denmark**

Post-Doc *at Centre for Quantum Mathematics*   *2022-Present*

Mentor: Vivek Shende

Education

Université Grenoble Alpes   **Grenoble, France**

Ph.D. *in Mathematics*   *2019-2022*

Thesis: Sheaf Techniques and Symplectic Geometry

Advisor: Damien Gayet, Stéphane Guillermou and Claude Viterbo

Université Grenoble Alpes   **Grenoble, France**

M2R *Mathematics and applications*   *2018–2019*

Advisor: Stéphane Guillermou

Academy of Mathematics and Systems Science, CAS   **Beijing, China**

MS *in Fundamental mathematics*   *2015–2018*

Advisor: Wei-dong RUAN (阮卫东)

Hunan University   **Changsha, Hunan, China**

BS *in Mathematics and applied mathematics*   *2011–2015*

Advisor: Jun LI (李军)

Papers

○ **Non-linear microlocal cut-off functors**

  Preprint: arXiv 2406.02725. Submitted.

○ **On the Hochschild cohomology of Tamarkin categories**

  Joint with Christopher Kuo and Vivek Shende. Preprint: arXiv 2312.11447. Submitted.

○ **Contact non-squeezing at large scale via generating functions**

  Joint with Maia Fraser and Sheila Sandon. Preprint: arXiv 2310.11993. Submitted.

○ **Idempotence of microlocal kernels and S^1-equivariant Chiu-Tamarkin invariant**

  Preprint: arXiv 2306.12316.

○ **Capacities from the Chiu-Tamarkin Complex**

  To appear in Journal of Symplectic Geometry. arXiv 2103.05143.

Talks

- **Conference talks**

Jul. 2023: Workshop on Geometric Representation Theory and Applications, YMSC/Tsinghua University, Beijing (Student presentation)

Mar. 2023: Pseudoholomorphic Curves in Hamiltonian Dynamics, Mathematical Institute Heidelberg

Feb. 2022: ANR COSY meeting, Paris (Online presentation)

Jan. 2022: Global Youth Forum 2022, IGP, University of Science and Technology of China, Hefei (Online)

Oct. 2021: UU-Nantes Workshop on Lagrangian cobordisms and Floer theory, Uppsala

- **Seminar talks**

May. 2024: Everytopic Seminar, Brandeis University

Apr. 2024: Topology Seminar, University of Southern California

Mar. 2024: QM Research Seminar, CQM, University of Southern Denmark, Odense

Jan. 2024: Symplectix Seminar, Institut Henri Poincaré, Paris

Dec. 2023: Topology Seminar, IRMA, Strasbourg

Nov. 2023: Bonn Symplectic Geometry Seminar, MPIM, Bonn

Aug. 2023: Institute of Mathematical Sciences, ShanghaiTech University, Shanghai

Aug. 2023: AMSS, Chinese Academy of Sciences, Beijing

Mar. 2023: QM Research Seminar, CQM, University of Southern Denmark, Odense

Nov. 2022: QM Research Seminar, CQM, University of Southern Denmark, Odense

Oct. 2022: Institute of Mathematical Sciences, ShanghaiTech University, Shanghai

Sep. 2022: Western Hemisphere Virtual Symplectic Seminar (Online)

Sep. 2022: Séminaire compréhensible, Institut Fourier, Grenoble

Feb. 2022: Geometry Seminar, Department of mathematics, Tsinghua University, Beijing

Dec. 2021: Topology Seminar, IRMA, Strasbourg

Noc. 2021: Geometry and Topology Seminar, Toulouse

Nov. 2021: Symplectix Seminar, Institut Henri Poincaré, Paris

Oct. 2021: Topology Seminar, Institut Fourier, Grenoble

Apr. 2021: Symplectic Zoominar, CRM-Montréal, Princeton/IAS, Tel Aviv, and Paris (Online)

Aug. 2021: Virtual Kylerec Seminar (Online)

Nov. 2020: Séminaire compréhensible, Institut Fourier, Grenoble (Online)

Awards

2018: IDEX M2 Scholarship of Université Grenoble Alpes.

2015: Excellent New Student Scholarship, AMSS, CAS.

2014: Shiing-Shen Chern (Geometry and Topology) Silver Award, S.T.Yau College Student Mathematics Contests.

Activities (co-)Organized

Spring 2024: QM Research Seminar, CQM, SDU. co-Organized.

Fall 2023: QM Research Seminar, CQM, SDU. co-Organized.

May 2020: Bingyu's Friends - Young Mathematicians Colloquium, Online.

Spring 2017: Student Seminar on K3 Surfaces, AMSS, CAS.

Fall 2016: Student Seminar on Homological algebra, Sheaves and Stacks, AMSS, CAS.

Spring 2016: Student Seminar on Gauge Theory, AMSS, CAS.

Teaching

Fall 2024: Advanced Topic in Quantum Mathematics: Toric Geometry and F-theory.

University of Southern Denmark. **Instructor**, joint with Muyang Liu.

Fall 2023: Advanced Topics in Geometry and Topology: Introduction to Mirror Symmetry.

University of Southern Denmark. **Instructor**

Spring 2018: TA on Linear Algebra-II.

University of Chinese Academy of Sciences. **Instructor: Prof. Ziming LI (李子明)**.

Fall 2017: TA on Calculus-III A.

University of Chinese Academy of Sciences. **Instructor: Prof. Wei-dong RUAN (阮卫东)**.

Skill

Cooking: Intermediate   *I would like to be a chef if I don't want to do math anymore.*

Chinese: Mother tongue

English: Intermediate

French: Beginner   *Maybe nothing*