# Bingyu Zhang 张秉宇

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### **Research Interests**

I am interested in mathematics from physics, in particular, symplectic geometry/topology and mirror symmetry.

Now, I am focusing on sheaves techniques in symplectic geometry. In the beginning, we are trying to use sheaves to obtain some results about symplectic geometry of cotangent bundles. Next, we will go beyond the cotangent bundle to general symplectic manifolds.

I am also interested in gauge theory.

#### **Education**

Université Grenoble Alpes Grenoble, France

Ph.D. student in Pure mathematics 2019-Present

Project : Sheaves Techniques and Symplectic Geometry.

Advisor : Damien Gayet, Stéphane Guillermou, and Claude Viterbo

Université Grenoble Alpes Grenoble, France

M2R Fundamental Mathematics 2018–2019

Advisor : Stéphane Guillermou

Academy of Mathematics and Systems Science, CAS Beijing, China

MS in Pure Mathematics 2015–2018

Advisor: Wei-dong Ruan(阮卫东)

Hunan University Changsha, Hunan, China

BS in Mathematics 2011-2015 Advisor: Jun Li(李军 )

## **Papers**

#### — Capacities from the Chiu-Tamarkin complex.

Preprint: arXiv 2103.05143

#### **Talks**

April 2021: Capacities from the Chiu-Tamarkin complex.

Symplectic Zoominar, CRM-Montréal, Princeton/IAS, Tel Aviv, and Paris(Online

Nov 2020: What is "larger" in symplectic geometry?

Séminaire compréhensible, l'Institut Fourier, Université Grenoble Alpes

July 2020: Embedding problem from microlocal sheaf theory.

Shanghai Maths Seminar, Tongji University

April 2020: Homotopy equivalence of nearby Lagrangian and sheaf quantization.

Student Seminar on Symplectic Geometry, Princeton University

May 2017 :  $A_{\infty}$ -relations and Fukaya Categories.

Topics on Non-commutative Geometry, YMSC, Tsinghua University

## **Awards**

2018: IDEX M2 Scholarship of Université Grenoble Alpes.
2015: Excellent New Student Scholarship, AMSS, CAS.
2012,2014: The First Class Scholarship, Hunan University.

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

Contests.

## **Activities Organized**

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

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

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

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

## Skill

**Cooking**: Intermediate

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

Chinese: Mother tongue
English: Intermediate

Even else: Designers

French: Beginner

Maybe nothing