

Zhouhang MAO

Curriculum Vitæ

Institut de Mathématique d'Orsay
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Academic Position

Oct 2021– **Postdoctoral Researcher, Institut de Mathématique d'Orsay**
Mentor: Kęstutis Česnavičius

Education

Sep 2018–Oct 2021 **Ph.D. in mathematics, Sorbonne Université**
Thesis: On derived crystalline cohomology and perfectoid rings as Thom spectra
Advisor: Matthew Morrow

Sep 2017–Aug 2018 **3rd year, École Normale Supérieure**

Sep 2016–Aug 2017 **M2 in mathematics, Université Paris-VII**
Mémoire: Comparisons of different constructions in algebraic K-theory
Advisor: Matthew Morrow

Sep 2015–Aug 2016 **M1 in mathematics, École Normale Supérieure**

Sep 2012–Aug 2015 **B.Sc. in mathematics, Fudan University**

Preprints

2021 **Revisiting derived crystalline cohomology, arXiv:2107.02921, submitted**

2020 **Perfectoid rings as Thom spectra, arXiv:2003.08697, submitted with revision**

Conferences and workshops attended

Sep 2022 **Algebra Day in Paris, Institut Henri Poincaré**

Jun 2022 **Twinned Conference on Homotopy Theory with Applications to Arithmetic and Geometry, MPIM**

Jun 2022 **CATS60, Institut de Mathématiques de Toulouse**

Jun 2022 **Workshop on derived geometry, CRM Barcelona**

Mar 2022 **Cohomology of Varieties, IMPAN in Warsaw**

Jan 2020 **Issac Newton Institute KAWH01 — Introductory workshop on motives**

Mar 2019 **Arizona Winter School 2019 — Topology and Arithmetic**

Sep 2018 **CATS5 — Categories and stacks in algebraic geometry and algebraic topology**

Invited talks

Revisiting derived crystalline cohomology

8 Mar 2022 **Séminaire d'Homotopie en Géométrie Algébrique, Institut de Mathématiques de Toulouse**

9 Nov 2021 **Séminaire d'Arithmétique et de Géométrie Algébrique, Université Paris-Saclay**

Perfectoid rings as Thom spectra

3 Dec 2020 **Seminar of the algebraic topology group, Université Paris Nord**

Teaching Experience

2021 Spring TD L2 Intégrale de Lebesgue sur \mathbb{R}^n

(Exercise sessions: Lebesgue integral on \mathbb{R}^n)

2020 Fall TD L2 Algèbre et Arithmétique

(Exercise sessions: Elementary Number Theory and Algebra)

2020 Spring TD L2 Algèbre linéaire et bilinéaire IIa

(Exercise sessions: Linear and bilinear algebra)

2019 Fall TD L2 Séries et Intégrales

(Exercise sessions: Series and Integrals)