Keyao PENG

Doctorant

Epiphany is not about solving a complex puzzle, but something that was too simple to see.

Education

2020– **Ph.D.**, *Institut Fourier, Université Grenoble Alpes*, Grenoble, France.
Algebraic geometry,with advisor *Jean Fasel*

2019–2020 **Master**, *Institut Fourier, Université Grenoble Alpes*, Grenoble, France.
Mathématiques fondamentales

2015–2019 **Bachelor**, *Taishan College, Shandong University*, Jinan, China.
Majored in mathematics

Academic Activities

Feb 2022 Logic and higher structures, CIRM

Jan 2022 Linear Logic Winter School, CIRM

Sep 2021 Unifying Themes in Geometry, Lake Como

Sep 2021 The Six-Functor Formalism and Motivic Homotopy Theory, Milano

Sep 2021 Summer School on Derived and Triangulated Categories, Wuppertal

July 2021 Summer School ”Illustrating Mathematics”, PCMI

July 2021 Summer School ”Motivic Homotopy”, PCMI

July, Sep 2021 Series Workshops ”Expanding Horizons of Inter-universal Teichmüller Theory”, RIMS

June 2021 Topos online, IHES

June 2021 Tangent Categories and their Applications, BIRS

2020–2021 Working group on stratified homotopy theory, IAS

July 2020 Summer School ”Motivic, Equivariant and Non-commutative Homotopy Theory”, IHES

Skill

Language

Chinese Mother tongue

English C1

French B1

Computer

Language C#, Haskell, Purescript, Lean

Animation Blender

keyao.peng@univ-grenoble-alpes.fr

Interest

Synthetic geometry	Study geometry without using analysis, including algebraic geometry, arithmetic geometry, algebraic analysis and more
Homotopy	The geometry of ”path”, like A1 homotopy theory, homotopy type theory
Topos	Sketch an elephant
Higher math	Higher means add homotopy to everything, like set, algebra, category, topos, etc.

Paper and Thesis

Keyao Peng. Sheaves and differential equations: An introduction to algebraic analysis, 2019.

Keyao Peng. Milnor-witt motivic cohomology of complements of hyperplane arrangements, 2020.