

# Yichen Qin

## Curriculum Vitae

Centre de Mathématiques Laurent Schwartz  
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### Research Interests

My research interests are primarily in arithmetic geometry and number theory, mainly about the arithmetic of linear differential equations and exponential sums.

### Education

- 2019-present **PhD student in Mathematics**, *École Polytechnique*, France, under the supervision of Javier Fresán.  
Thesis defense date: 16 September 2022
- 2016–2019 **Master in Mathematics**, *École normale supérieure - PSL and Université Paris 7*, France.
- 2013–2017 **Bachelor in Mathematics**, *Tsinghua University*, China.

### Talks

#### [talks on my research](#)

- 2021 *L-functions of Kloosterman sheaves*. Algebraic Geometry seminar in Humboldt-Universität zu Berlin, 2 February 2022
- 2021 *L-functions of Kloosterman sheaves*. Seminar in Peking University, 27 December 2021

#### [expositional talks](#)

- 2021 *The Malgrange-Sibuya theorem and Stokes torsors*. Summer School *Irregular Riemann-Hilbert Correspondence*, Aussois, 20–27 September 2021.
- 2018 *Standard Hodge theory of  $H^1$  as non-abelian Hodge theory*. Jeunes en Arithmétique et Variétés Algébriques, Tatihou Island, 22–27 July 2018.

### Seminar Organized

- 2019–2022 RéGA (Réseau des Étudiants en Géométrie Algébrique), IHP

### Teaching

- 2021–2022 Teaching assistant of MAA201-*Euclidean and Hermitian spaces* at École Polytechnique.

- 2020-2021 Teaching assistant of MAA206-*Quadratic Forms and Applications* at École Polytechnique.
- 2019-2020 Teaching assistant of MAA105-*Integral and Differential Calculus* at École Polytechnique.
- 2018-2019 Teaching assistant of MAA206-*Quadratic Forms and Applications* at École Polytechnique.

## Conferences and Schools

- 2022 Conference *Number Theory and Algebraic Geometry*, ICM sectional workshop, ETH Zürich, 11-14 July 2022.
- 2022 Summer school on *Motives and Arithmetic Groups*, IRMA, Strasbourg, 13-17 June 2022.
- 2022 Conference *D-modules: Applications to Algebraic Geometry, Arithmetic and Mirror Symmetry*, CIRM, Marseille, 11–15 April 2022.
- 2021 Summer school *Irregular Riemann-Hilbert Correspondence*, Aussois, 20–24 September 2021.
- 2019 Summer school on *Motives and Stacks*, Essen, 23–27 September 2019.
- 2019 Summer school *Immeubles et grassmanniennes affines*, CIRM, Marseille, 26 August–6 September 2019.
- 2019 Summer school *Mixed Hodge Modules: Applications*, Île de Tatihou, 22–26, July 2019.
- 2019 Summer school *Arithmetic of connections*, ETH Zürich, Monte Verità, 15–19 July 2019.
- 2019 Summer school *Arithmetic Geometry in Carthage*, Tunisian Academy Beit al-Hikma, Carthage, Tunisia, 17–21 June 2019.
- 2019 Winter school *Trace functions and their applications*, ETH Zürich, Monte Verità, 13–18 january 2019.
- 2018 Summer school *Hodge theory of character varieties and the  $P = W$  conjecture*, Île de Tatihou, 22–27 july 2018.
- 2018 Conference *Arithmetic and Algebraic Geometry: a conference in honor of Ofer Gabber on the occasion of his 60th birthday*, IHÉS, 11–15 june 2018.
- 2017 Master Class *Arithmétique et Géométrie Algébrique : une introduction*. IRMA, Strasbourg, 10–14 april 2017.

## Awards and scholarship

- 2019–2022 ‘Bourses Monge’ scholarship of École Polytechnique.
- 2016–2019 ‘International selection’ program of École normale supérieure, Paris.
  - 2016 Team Award(Gold medal) with Yi Wang, Chengyang Shao, Yuxuan Yang and Haoyu Wang, S.T.Yau College Student Mathematics Contests.
- 2014–2016 Tsinghua Xuetaang scholarship.
  - 2015 Friends of the Tsinghua-Guanghua scholarship.

- 2014 Friends of the Tsinghua-Zheng Geru scholarship.  
2013 Third prize at the Chinese Mathematical Olympiad.  
2011 First prize at the Chinese Western Mathematical Olympiad.  
2011&2012 First prize at the National High School Competition of Mathematics.

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## Language

Chinese **Mother tongue**  
English **Fluent**  
French **Intermediate**