ZHENGJIANG LIN

home page: https://acrescent.github.io/

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EDUCATION

Zhejiang University

Hangzhou, Zhejiang, China

Sep. 2015 – present

B.S. Candidate in Mathematics and Applied Mathematics

• Overall GPA: 3.92/4.00 (rank 3/114)

• Third year GPA: 4.00/4.00

MIT Massachusetts, U.S.

Visiting Student Aug. 2017 – Dec. 2017

• Secured A in three graduate courses and one undergraduate course; audited Algebraic Geometry

The Chinese University of Hong Kong

Hong Kong, China

Visiting Student

Aug. 2018 - Sep. 2018

• Studied graduate-level algebraic topology, differential topology and Morse theory

RESEARCH EXPERIENCE

Zhejiang University (Department of Mathematics)

Research Assistant to Dr. Wenshuai Jiang

Multiple projects in geometric analysis

Mar. 2018 – Jul.2018

- Considering Sobolev inequalities on a special measure space
- Finding optimal constant of Logarithmic-Sobolev inequalities
- Considering generalization of Cheeger's compactness theorem

AWARDS

- 1. China National Scholarship (twice; top 1% performance each year)
- 2. Tang Lixin Scholarship (awarded to those with outstanding leadership and academic performance)
- 3. Outstanding Winner & INFORMS Award at 2017 American Interdisciplinary Contest in Modeling(top prize; held by SIAM and INFORMS)
- 4. Chu Kochen Honors College at Zhejiang University

ACADEMIC WORK EXPERIENCE

- 1. Teaching Assistant of Mathematical Analysis at Zhejiang University
- $Mar.\ 2018-Jul.\ 2018$

2. Teaching Assistant of Algebraic Topology at Zhejiang University

Sep. 2018 – present

GRADUATE-LEVEL COURSES

- 1. Algebraic Topology I (studied at MIT, Hatcher's Algebraic Topology)
- 2. Geometry of Manifolds I (studied at MIT, do Carmo's *Riemannian Geometry* and some parts of Yau's *Lectures on Differential Geometry*)
- 3. Introduction to Lie Groups (studied at MIT, course notes)
- 4. Algebraic Number Theory (Jurgen Neukirch's Algebraic Number Theory)
- 5. Elliptic Partial Differential Equations of Two Order (Fanghua Lin's Elliptic Partial Differential Equations)
- 6. Seminar of Lie Algebra (Humphreys's Introduction to Lie Algebras and Representation Theory)

HIGH-LEVEL READINGS

- 1. Peter Lax's Functional Analysis (completed most exercises in the first twenty-five chapters in sophomore year)
- 2. Michael Atiyah's *Introduction to Commutative Algebra* (most parts)
- 3. John Milnor's *Morse Theory* (completed)
- 4. Raoul Bott's Differential Forms in Algebraic Topology (studied at Chinese University of Hong Kong)
- 5. Victor Guillemin's *Differential Topology* (completed)
- 6. Phillip Griffiths's Introduction to Algebraic Curves (completed)
- 7. Peter Petersen's Riemannian Geometry
- 8. Peter Topping's Lectures on the Ricci Flow