

Chao Li

| | | |
|---------------------|---|---|
| CONTACT INFORMATION | Stanford University Department of Mathematics 380 Serra Street Stanford, CA, 94305 USA | (650)739-9165 rchlch@stanford.edu http://web.stanford.edu/~rchlch |
| RESEARCH INTERESTS | Differential geometry and geometric analysis with emphasis on geometric variational problems, using partial differential equations and geometric measure theory. Research has applications to topology and mathematical general relativity. | |
| EDUCATION | Stanford University Ph.D. Candidate, Mathematics (expected June 2018) <ul style="list-style-type: none">• Advisors: Richard Schoen and Brian White Peking University B.A. in Mathematics, July 2013 <ul style="list-style-type: none">• GPA 3.88 on 4.0 scale, ranking 1/160. | |
| PUBLICATIONS | <i>A polyhedron comparison theorem for 3-manifolds with positive scalar curvature</i> , arXiv:1710.08067 . <i>Positive scalar curvature with skeleton singularities</i> , arXiv:1708.08211 (joint with Christos Mantoulidis). <i>Index and topology of minimal hypersurfaces in R^n</i> , arXiv:1605.09693 , to appear in <i>Calculus of Variation and PDE</i> . | |
| INVITED TALKS | Instituto de Matemática Pura e Aplicada (IMPA) XIX School on Differential Geometry. Video available. | July 2016 |
| | University of California, Santa Barbara Geometry Seminar | March 2017 |
| | ETH Zürich Advances in Geometric Analysis | June 2017 |
| | University of Chicago Geometric Analysis Seminar | October 2017 |
| | Princeton University Differential Geometry & Geometric Analysis Seminar | November 2017 |
| | Massachusetts Institute of Technology Geometric Analysis Seminar | December 2017 |
| | San Diego Convention Center AMS Joint Mathematical Meeting, Special Session on Geometric Analysis | January 2018 |

TEACHING
EXPERIENCE

Teaching Assistant

Stanford Math 51, Linear Algebra and Differential Calculus of Several Variables

- Fall 2014, Winter 2015
- Taught two 50-minute sections twice a week. Held weekly office hours. Graded exams.

Stanford Math 42, Calculus ACE (Additional Calculus for Engineers)

- Winter 2016
- ACE program is designed to enhance diversity among engineering students.
- Taught one 100-minute section twice a week. Held weekly office hours. Graded exams.

Minimal Surfaces: Old and New

- Summer 2017, lecture by Alessandro Carlotto.
- As part of Summer School on Geometric Analysis in the Fields Institute for Research in Mathematical Sciences

Course Assistant in Stanford University

Math 113: Linear Algebra and Matrix Theory

Math 20: Integral Calculus

Math 172: Lebesgue Integration and Fourier Analysis

Math 114: Applied Matrix Theory

Math 382: Algebra Ph.D. qualifying exams

Held weekly office hours. Wrote solutions. Graded homework and exams.

Math Olympiads Instruction

Did several part-time jobs as instructor on Olympiad Math.

Successfully trained high school students: one IMO gold medalist, many pursued professional mathematical careers.

HONORS AND
AWARDS

S. T. Yau College Students Mathematics Contests, Team Contest 2012
Silver Medal

Chinese National Scholarship 2012
National award for outstanding students in universities and colleges

The Mathematical Contest in Modeling 2012
Meritorious Honor

Outstanding Students of Peking University 2010, 2011, 2012
Awarded for outstanding Peking University students

Chinese Mathematics Olympiad 2009
Perfect score gold medal

All Russian Mathematics Olympiad 2007
Gold medal

Academic
activities

Note taker for Nachdiplom lectures Spring 2017
Topics in scalar curvature
Lectures by Richard Schoen