

Jason (Chieh-Cheng) Lo

CONTACT INFORMATION Department of Mathematics
Stanford University
Building 380, Sloan Hall
Stanford, CA 94305
E-mail: jasonlo@math.stanford.edu
Homepage: math.stanford.edu/~jasonlo

RESEARCH INTERESTS Algebraic geometry: stability conditions, derived categories, moduli spaces

EDUCATION **Stanford University**, Stanford, California

PhD, Mathematics (expected graduation date: June 2010)

- Thesis: *Moduli Spaces of PT-Stable Objects*
- Advisor: Jun Li

Australian National University, Canberra, Australia

Enrolled in PhD program, Mathematical Sciences Institute and National ICT Australia, September 2004 - September 2005

- Research topic: Algebraic geometry and applications in control theory
- Advisors: Amnon Neeman and Jochen Trumpf

BSc (Honours) in Pure Mathematics, June 2004

- with First Class Honours and the University Medal
- Honours thesis: *Foundations of Algebraic Geometry*
- Advisor: Amnon Neeman

University of Sydney, Sydney, Australia

BSc (Advanced)(Mathematics), July 2003

PUBLICATIONS

- Jason Lo, *Moduli Spaces of PT-Stable Objects*, preprint.
- Jason Lo, *The Pole Placement Problem and Degeneracy of Autoregressive Systems*, NICTA technical report, September 2005.

SELECTED

SEMINAR

PRESENTATIONS

- Algebraic Geometry Seminar, University of British Columbia: *Stability Conditions and the Moduli of PT-Stable Objects*, January 2010.
- Student Algebraic Geometry Seminar, Stanford University:
 - From Sheaves to Complexes of Sheaves*, November 2009.
 - The Octahedral Axiom in Triangulated Categories*, November 2008.
 - Overview of Stability Conditions*, May 2008.
 - A Projective Moduli Space of Derived Objects*, December 2007.
- Systems and Control Seminar, RSISE, Australian National University: *Algebraic Geometry in Control Theory*, April 2005.

SELECTED
HONOURS AND
SCHOLARSHIPS

- Australian National University-National ICT Australia PhD Scholarship, 2005.
- Australian National University Honours Scholarship, 2003.
- Science Faculty International Merit Scholarship, University of Sydney, 2002 and 2003.
- Summer Research Scholarship in Mathematics, Australian National University, December 2001-February 2002 and December 2002-February 2003 (topics: commutative algebra; supervised by Amnon Neeman).
- Mechanical Engineering Prize for Outstanding Proficiency, University of Sydney, 2001.
- Fourth place, Australian Mathematical Olympiad, 1999.

TEACHING
EXPERIENCE

Stanford University

Teaching Assistant: Leading sections and holding office hours for

- Math 42 (Accelerated Calculus for Engineers), fall 2009.
- Math 51 (Linear Algebra and Differential Calculus in Several Variables), fall 2008 and fall 2006
- Math 41 (Calculus), fall 2007

Course Assistant: Holding office hours, writing up homework solutions, grading homework and occasional guest-lecturing for

- Math 104 (Applied Matrix Theory), summer 2009
- Math 161 (Set Theory), spring 2009
- Math 19 (Calculus), summer 2008
- Math 106 (Functions of a Complex Variable), winter 2008
- Math 121 (Abstract Algebra II), winter 2007

Australian National University

Tutor: Math 1013, Mathematics and Applications 1, Semester 1, 2005.

CONFERENCES
ATTENDED

- Summer School on Mathematical String Theory, Virginia Tech, June-July 2010.
- Wall-Crossing in Mathematics and Physics, UIUC, May 2010.
- GCOE International Conference - Mirror Symmetry and Gromov-Witten Invariants, University of Tokyo, December 2009.
- Workshop on Recent Topics in Algebraic Geometry, and Conference on Arithmetic Geometry and Moduli Spaces in Algebraic Geometry, HangZhou, China, August 2009.
- Modern Moduli Theory, MSRI, February 2009.
- Classical Algebraic Geometry Today, MSRI, January 2009.
- Spring School - Holomorphic Symplectic Manifolds and Derived Categories, Gargnano del Garda, Italy, March 2008.

- Deformation Theory and Moduli in Algebraic Geometry, UC Berkeley, July 2007.
- VIGRE Mini-Course on Derived Categories, University of Utah, June 2007.
- Western Algebraic Geometry Seminar
 - University of British Columbia, spring 2010.
 - UCLA, fall 2009.
 - UC Berkeley, spring 2009.
 - University of Utah, fall 2008.
 - University of Colorado, fall 2007.
 - University of Washington, spring 2007.
- Course on Algebraic Structures, ICE-EM Australian Graduate School in Mathematics, Brisbane, Australia, July 2005.

PROFESSIONAL
EXPERIENCES

Australian Mathematics Trust

Assistant to Research Officer: Designing problems for Australian Mathematical Olympiad Committee training programs for junior high school students, December 2003 - February 2004.

Grader: providing feedback for high school students in Australian Mathematics Olympiad Committee correspondence programs, 2000-2003.