Changho Han — *Curriculum Vitae*

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Personal

1 Oxford Street, Room 431d
Cambridge, MA 02138, USA
Canadian Citizen, born in Seoul, South Korea, on January 3, 1992.
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Education

· **Harvard University**, Ph.D., August 2014 – May 2019,

· **University of Toronto**, H.B.Sc., September 2010 – June 2014.

Publications

1. (with Ethan Cotterill and Ignacio Darago) *Arithmetic inflection points of arithmetic linear series on hyperelliptic curves (temporary title)*, in preparation
2. (with Jun-Yong Park) *Arithmetic of the moduli of (un)stable elliptic surfaces (temporary title)*, in preparation
3. (with Anand Deopurkar) *Stable log quadrics (temporary title)*, in preparation
4. (with Anand Deopurkar) *Stable log surfaces, admissible covers, and canonical curves of genus 4*, arXiv:1807.08413 (Submitted to Compos. Math.)
5. (with Jun-Yong Park) *Arithmetic of the moduli of semistable elliptic surfaces*, Math. Ann. (2019) `https://doi.org/10.1007/s00208-019-01830-7`

Awards

· NSERC Postgraduate Scholarships-Doctoral Program, May 2016 - April 2019

· The Norman Stuart Robertson Scholarship in Mathematics, 2013

· NSERC Undergraduate Student Research Awards, May 2012 - August 2012

· The Coxeter Scholarship in Mathematics, 2012

· Queen Elizabeth II Aiming for Top Scholarship, 2010 – 2014

Research

Algebraic geometry, moduli spaces/stacks, KSBA compactifications, Hassett-Keel program, minimal model program, $\mathbb{A}^1$-enumerative geometry, rational points on varieties, deformation theory, degenerations, and Grothendieck ring of varieties/stacks.

Recent Talks

Spring 2019

· **Mar** *Harvard/MIT Algebraic Geometry Seminar*, Harvard University, Cambridge, MA.
'Almost K3' stable log surfaces and curves of genus 4.

· **Feb** *BC NT & AG Seminar*, Boston College, Chestnut Hill, MA.
'Almost K3' stable log surfaces and curves of genus 4.

· **Jan** *Pick My Brain Seminar*, Northeastern University, Boston, MA.
Modular compactifications of moduli spaces in algebraic geometry.

Spring 2018

· **Feb** *Algebraic Geometry Seminar*, Brown University, Providence, RI.
A birational model of moduli of genus 4 curves using stable log surfaces.

Spring 2017

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· **May** *AMS graduate student conference in algebra and number theory*, Brown University, Providence, RI.
Compactifying moduli of genus four curves using moduli of log surfaces.

· **Jan** *Algebraic Geometry Seminar*, University of Georgia, Athens, GA.
KSBA compactifications of smooth quadrics and trigonal genus four curves.

Conferences

— **March 2019**, *Arizona Winter School 2019: Topology and Arithmetic*, University of Arizona, Tucson, AZ

— **December 2018**, *FRG Workshop on Moduli Spaces of sheaves and Bridgeland Stability*, UIC, Chicago, IL

— **November 2018**, *D-Modules and Hodge Theory*, UIC, Chicago, IL

— **October 2018**, *Moduli Spaces: Birational Geometry and Wall Crossings*, BIRS, Banff, AB, Canada

— **October 2018**, *Western Algebraic Geometry Symposium*, University of Oregon, Eugene, OR

— **September 2018**, *Algebraic Geometry Northeastern Series*, Brown University, Providence, RI

— **July 2018**, *Moduli Spaces in Algebraic Geometry and Applications*, satellite conference of ICM, Campinas, Brazil

— **June ~July 2018**, *Summer Graduate School on Derived Categories*, MSRI, Berkeley, CA

— **January 2018**, *Korean-Italian Meeting on Algebraic Geometry*, KIAS, Seoul, South Korea

— **October 2017**, *Algebraic Geometry Northeastern Series*, Northeastern University, Boston, MA

— **August 2017**, *Conference on Birational Geometry*, Simons Foundation, New York, NY

— **June 2017**, *Géométrie Algébrique en Liberté XXV*, University of Bath, Bath, UK

— **June 2017**, *Linear Systems on Irregular Varieties*, Como, Italy

— **May 2017**, *Geometry of Moduli Spaces*, UCSD, La Jolla, CA

— **May 2017**, *Mini-workshop in Birational Geometry and Hodge Theory*, Northwestern University, Evanston, IL

— **December 2016**, *Workshop on Combinatorial Moduli Spaces and Intersection Theory*, Fields Institute, Toronto, ON, Canada

— **August 2016**, *Introductory Workshop on Combinatorial Algebraic Geometry*, Fields Institute, Toronto, ON, Canada

— **July 2016**, *Higher Dimensional Algebraic Geometry*, University of Utah, Salt Lake City, UT

— **July 2015**, *AMS Summer Institute on Algebraic Geometry*, University of Utah, Salt Lake City, UT

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— **April 2015**, *New Techniques in Birational Geometry*, Stony Brook University, Stony Brook, NY

Service

· Organized two student algebraic geometry seminars (BAGS and AGLS) at Harvard, Spring 2015 $\sim$ Fall 2017

· Co-organized undergraduate math seminars at University of Toronto, Fall 2012 $\sim$ Spring 2013

Teaching

Harvard University

· *Coaching Fellow for Math 1b (Calculus, Series, and Differential Equations)*, Spring 2019. {Responsible for taking care of students who need extra help to succeed.}

· *Teaching Fellow for Math 1b (Calculus, Series, and Differential Equations)*, Fall 2017. {Responsible for planning and giving lectures to 20 students, holding office hours, and grading exams.}

· *Teaching Fellow for Math 21b (Linear Algebra and Differential Equations)*, Spring 2017

· *Graduate Course Assistant for Math 258Y (degenerations in algebraic geometry)*, Fall 2016. {Responsible for planning and running sessions that complement the lectures, grading homeworks.}

· *Teaching Fellow for Math 1b (Calculus, Series, and Differential Equations)*, Fall 2015

University of Toronto

· *Teaching Assistant for MAT136H1 (Calculus 1(B))*, Spring 2014. {Responsible for running tutorials and grading a midterm.}

· *Teaching Assistant for MAT135H1 (Calculus 1(A))*, Fall 2013

· *Teaching Assistant for MAT136H1 (Calculus 1(B))*, Spring 2013

· *Teaching Assistant for MAT135H1 (Calculus 1(A))*, Fall 2012

References

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