Curriculum Vitae

(617) 631-2811 Changho.Han@uga.edu https://hanchangho.github.io/

Personal 200 D.W. Brooks Drive, Room 606

Athens, GA 30602, USA

Canadian Citizen, born in Seoul, South Korea, on January 3, 1992.

Phone: (617) 631-2811

Employment • University of Georgia Limited Term Assistant Professor, 2019 – present

Education • Harvard University, Ph.D., 2014 – 2019,

Stable log surfaces, trigonal covers, and canonical curves of genus 4.

Committee: Joseph Harris, Maksym Fedorchuk, Dori Bejleri.

· University of Toronto, H.B.Sc., 2010 – 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. https://doi.org/10.1007/s00208-019-01830-7 (2019)

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: KSBA compactifications of moduli of surfaces, Hassett-Keel program on moduli of curves, birational geometry and Minimal Model Program, deformations and degenerations, \mathbb{A}^1 -enumerative geometry, Moduli of elliptic surfaces, and Grothendieck ring of varieties/stacks.

Recent Talks Summer 2019

- · **July** *Algebraic Geometry Seminar*, KAIST, Daejeon, South Korea. An arithmetic (or real) count of inflection points on hyperelliptic curves.
- July Algebraic Geometry Seminar, KAIST, Daejeon, South Korea.
 Moduli of 'almost K3' stable log surfaces and curves of genus 4

Spring 2019

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- · May Valley Geometry Seminar, UMass Amherst, Amherst, MA. Moduli of 'almost K3 stable log surfaces'
- · Mar Harvard/MIT Algebraic Geometry Seminar, Harvard University, Cambridge,
 - '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

- · 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** May 2019, Recent Progress in Moduli Theory, MSRI, Berkeley, CA
 - 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
 - May 2018, Birational Geometry and Arithmetic, ICERM, Providence, RI
 - January 2018, Korean-Italian Meeting on Algebraic Geometry, KIAS, Seoul, South Korea
 - October 2017, Algebraic Geometry Northeastern Series, Northeastern University, Boston, MA

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- 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
- 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 – Fall 2017
- Co-organized undergraduate math seminars at University of Toronto, Fall 2012 Spring 2013

Teaching

University of Georgia

· Instructor for Math 1113 (Precalculus), Fall 2019.

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

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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

Joseph Harris

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Paul Hacking

University of Massachusetts Amherst Lederle Graduate Research Tower, Box 34515 Amherst, MA 01003-9305, USA hacking@math.umass.edu

Cliff Taubes (Teaching)

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Barry Mazur

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