

Quoc P. Ho

IST Austria

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IST Austria
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Employment

2017–present **Postdoctoral researcher**,
Institute of Science and Technology Austria, Klosterneuburg, Austria.

Education

- 2011–2017 **PhD Candidate in Mathematics**,
University of Chicago, Chicago, IL.
MSc in Mathematics awarded in 2012.
Mentors: Ngô Bao Châu, Dennis Gaitsgory.
Interests: Algebraic Geometry, Number Theory, Representation Theory.
- 2007–2011 **AB in Mathematics**,
Princeton University, Princeton, NJ.
Graduated with High Honors. Member of Phi Beta Kappa.
- 2005–2007 **International Baccalaureate (IB)**,
Lester B. Pearson UWC, Victoria, BC, Canada.

Papers

- 2018 Densities and stability in algebraic geometry via factorization homology (submitted).
- 2016 The Atiyah-Bott formula and connectivity in chiral Koszul duality (submitted).
- 2017 Free factorization algebras and homology of configuration spaces in algebraic geometry, *Selecta Mathematica (N.S.)*, Vol. 23 (2017), No. 6, pp. 2437–2489.
- 2014 Average Size of 2-Selmer Groups of Elliptic Curves over Function Fields, with B.V.H. Lê and B.C. Ngô, *Vol. 21 (2014), No. 6, pp. 1305–1339*.

Invited Talks

- 2018 Université Paris Diderot, Local Geometric Langlands Conference.
Factorizable algebras and categories (expository)
Université Paris Diderot, Algebraic Geometry Seminar.
National University of Singapore, Pan Asian Number Theory Conference.
National University of Singapore, Pan Asian Number Theory Conference.
Kavli IPMU Japan, Vertex Algebras, Factorization Algebras and Applications Conference.
ETH Zürich, Algebraic Geometry Seminar.

- 2017 Duke University, Number Theory Seminar.
IST Austria, Algebraic Geometry Seminar.
- 2016 Northwestern University, Topology Seminar.
Rice University, Algebraic Geometry/Number Theory Seminar.
Purdue University, Topology Seminar.
- 2015 University of Wisconsin-Madison, Number Theory Seminar.
- 2014 MSRI, Geometric Representation Theory Semester.
Working group on the Geometric Satake isomorphism (expository).
- 2013 VASM, Pan Asian Number Theory Conference.
- 2012 Vietnam Institute for Advanced Study in Mathematics (VIASM) Summer School.
The work of Bhargava-Shankar (expository).

Prizes and Scholarships

- 2011–2013 McCormick Fellowship for Graduate Students.
- 2007–2011 Davis Fellow, *Full 4-year scholarship (tuition, room and board) to attend Princeton University.*
 - Third prize, *International Mathematics Competition for University Students*, Budapest, Hungary.
 - Shapiro Prize for Academic Excellence.
 - German Book Prize.
- 2005–2007 *Full 2-year scholarship (tuition, room and board) to attend Lester B. Pearson UWC.*
- 2005 Second Prize, *National Mathematics Olympic of Vietnam.*
 - Gold Medal, *Mathematics Olympic of South Vietnam.*

Teaching Experience

- 2014–2017 **Lecturer**, *University of Chicago*, Chicago, IL.
MATH 195: Multi-variable Calculus (4 times),
MATH 196: Linear Algebra (3 times).
- 2013–2014 **Lecturer**, *University of Chicago*, Chicago, IL.
MATH 130s: Freshman Calculus sequence (3 quarters).
- 2012–2013 **College Fellow**, *University of Chicago*, Chicago, IL.
MATH 160s: Freshman Honors Calculus sequence (3 quarters), IBL (inquiry-based learning) style.

Other Activities

- 2016–present **Reviewer**, *zbMATH (formerly Zentralblatt MATH)*.

- 2014–2016 **Mentor**, *DRP: Directed Reading Program*.
Supervised undergraduate student participants doing independent studies.
Projects supervised: algebraic topology, de Rham cohomology, Galois theory and fundamental groups via Grothendieck's fiber functor formalism.
- Summer **Mentor**, *University of Chicago's Mathematics REU*.
- 2014 Supervised undergraduate student participants doing independent studies.
Projects supervised: Galois theory, fundamental groups, de Rham cohomology
- 2013–2014 **Co-organizer**, *Graduate Student Seminar on ℓ -adic Cohomology*.
- 2012–2013 **Co-organizer**, *Graduate Student Seminar (General Topic)*.

Additional Information

Languages	Vietnamese (native), English (fluent), German (intermediate), French (reading knowledge).
Interests and Skills	Programming (Scala, Java, Python, C), Music Composition and Performance, \LaTeX , Table Tennis.