

# Quoc P. Ho

*IST Austria*

Homepage: [quoc-ho.github.io](https://quoc-ho.github.io)

*IST Austria*

*Klosterneuburg, 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.  
Advisor: Ngô Bao Châu.  
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

- 2016 The Atiyah-Bott formula and connectivity in chiral Koszul duality.
- 2015 Free factorization algebras and homology of configuration spaces in algebraic geometry, *Selecta Mathematica (N.S.)*, 2017.
- 2013 Average Size of 2-Selmer Groups of Elliptic Curves over Function Fields, with B.V.H. Lê and B.C. Ngô, *Mathematical Research Letters*.

## Invited Talks

- 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 Pan Asian Number Theory Conference.
- 2012 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  $\ell$ -adic Cohomology.*
- 2012–2013 **Co-organizer**, *Graduate Student Seminar (General Topic).*

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## Additional Information

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