# Quoc P. Ho

IST Austria

Homepage: quoc-ho.github.io

IST Austria Klosterneuburg, Austria ⊠ qho@math.uchicago.edu

#### **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 Ellipitic 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 isomoprhism (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

- 2014–2016 Lecturer, University of Chicago, Chicago, IL.
  - MATH 195: Multi-variable Calculus (4 times).

MATH 196: Linear Algebra (2 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 Programming (Scala, Java, Python, C), Music Composition and Performance, 上下X, Table Skills Tennis.