

Thomas Harris

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Born: September 15, 1988

Citizenship: United Kingdom

Education

- Ph.D Mathematics, University of Southampton, 2015.
Thesis: *Binary complexes and algebraic K-theory*.
Supervisor: Dr. Bernhard Köck.
- M.Math Mathematics, University of Southampton, 2011.
Result: First class honours (finished first in year).
Received the School of Mathematics prize for best results in the year in 2010 and 2011.
- Secondary education, Gillingham School, 2007.
A grades at A-level in Maths, Further Maths, Physics, Religious Studies, and General Studies.
10 GCSEs, 7 at A* grade and 3 at A grade.

Scholarships and prizes

- Mathematical Research Fellowship, Mathematical Sciences, University of Southampton, 2014 – 2015.
Competitive award available following submission of a research statement and oral presentation.
- EPSRC Ph.D studentship, fees and maintenance, University of Southampton, 2011 – 2014.
- School of mathematics prize, best results in year, 2011
- School of mathematics prize, best results in year, 2010
- Nuffield undergraduate research bursary, 2009.
Project title: *Polynomial identities in Riemann–Roch theory*.
- Tuition fees scholarship, awarded for 5 A grades at A-level, 2007 – 2011.

Experience

Positions

- Research Associate, Department of Mathematical Sciences, Durham University, Oct – Dec 2015.

Publications

- *Algebraic proofs of some fundamental theorems in algebraic K-theory*,
Homology, Homotopy and Applications **17** (2015), no. 1, 267–280.
- *Exterior power operations via binary complexes*,
(with Bernhard Köck and Lenny Taelman), in preparation.

Talks

- *λ -operations on higher algebraic K-theory, revisited*, 5 May 2016.
Warwick algebra seminar.
- *Dold–Puppe complexes and exterior power operations in K-theory*, 16 Feb 2015.
Monday lunchtime pure seminar, Southampton.

- *Binary complexes and fundamental theorems of algebraic K-theory*, 10 Aug 2014.
International conference on K-theory and related topics, Beijing.
- *Binary complexes and algebraic K-theory*, 31 Jun 2014.
Young researchers in mathematics, Warwick.
- Three expository talks at the Southampton K-theory seminar. Spring / Summer 2014.
- *Algebraic K-theory done algebraically*, 19 Dec 2013.
Weihnachtsworkshop, Karlsruhe.
- *Algebraic K-theory done algebraically*, 25 Oct 2013.
Pure mathematics colloquium, Southampton.
- *Algebraic algebraic K-theory*, 17 Jun 2013.
Young researchers in mathematics, Edinburgh.
- Numerous expository talks at the Southampton PGR pure maths seminar. 2011 – 2015.

Conferences and workshops attended

- *Masterclass in topological K-theory*, Strasbourg. 21 – 27 Feb 2015
- *29th British topology meeting*, Southampton. 8 – 10 Sep 2014
- *Summer school: Derivators*, Freiburg. 18 – 22 Aug 2014
- *K-theory and related topics*, Beijing. 6 – 10 Aug 2014
- *Young researchers in mathematics*, Warwick. 30 Jun – 3 Jul 2014
- *11. Karlsruhe Weihnachtsworkshop*, Karlsruhe. 18 – 20 Dec 2013
- *The mathematical legacy of Jean-Louis Loday*, Strasbourg. 4 – 6 Sep 2013
- *Regulators and differential algebraic K-theory*, Freiburg. 22 – 26 Jul 2013
- *Young researchers in mathematics*, Edinburgh. 17 – 20 Jun 2013
- *65th British mathematical colloquium*, Sheffield. 25 – 28 Mar 2013
- *WCATSS: Advances in K-theory*, Stanford. 16 – 21 Jul 2012

Teaching

- *Galois theory*, for advanced high school students at Winchester College. 2014/2015
- *Metric spaces and topology*, TA. Third year course. Autumn 2014
- *Further number theory*, coursework marker. Third year course. Spring 2014 & 2015
- *Mathematics workshop*. Drop-in centre for engineering mathematics. 2013 – 2014
- *Number theory and cryptography*, TA. First year course. Autumn 2013
- *Foundations of computer science*, TA. First year CS course. Autumn 2012 & 2013
- *Linear algebra II*, TA. First year course. Spring 2012 & 2013
- *Calculus I*, TA. First year course. Autumn 2011 & 2012

Service

- *Book reviewer*, Newsletter of the LMS. 2014 –
- *Undergraduate mathematics seminars*, initiator and organiser. 2013 –
- *Postgraduate pure mathematics seminar*, organiser. 2012 – 2013

Memberships

- *London Mathematical Society*, associate member. 2014 –

Languages

- *English*: native speaker.
- *German*: intermediate.

References

- Dr. Bernhard Köck, b.koeck@soton.ac.uk
Reader in mathematics, University of Southampton
- Ms. Vesna Perisic, v.perisic@soton.ac.uk
Senior Teaching Fellow in Mathematics, University of Southampton.
- Dr. Marco Schlichting, m.schlichting@warwick.ac.uk
Associate professor in mathematics, University of Warwick

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http://www.tkmharris.net/cv/tharris_academic_cv.pdf