# Scott Corry

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## Employment

- Associate Professor of Mathematics, Lawrence University, 2013-

- Assistant Professor of Mathematics, Lawrence University, 2007-13

## Education

- Ph.D. in mathematics, University of Pennsylvania, 2007
  Advisor: Florian Pop

- B.A. in mathematics, Reed College, 2001

## Honors, Awards, Short-term Positions

- Director of Freshman Studies Program, Lawrence University, 2014-16

- Young Teacher Award, Lawrence University, 2011

- Visiting Fellow, Isaac Newton Institute for Math. Sciences, July-August 2009

- SAS Dissertation Fellow, University of Pennsylvania, 2006-2007

- Eugenio Calabi Scholar, UPenn Department of Mathematics, 2002-2007

- NSF Graduate Research Fellow, 2002-2006

- Dean's Scholar, University of Pennsylvania, 2005

- Good Teaching Awards, UPenn Dept. of Mathematics, Fall 2004, Spring 2005

- Phi Beta Kappa, Reed College, 2001

- Barry M. Goldwater Scholar, 2000

## Teaching

- Courses at Lawrence: Calculus I, II, III, Differential Equations with Linear Algebra, Foundations of Algebra, Foundations of Analysis, Linear Algebra, Topics in Geometry, Rings and Fields, Topics in Analysis, Topics in Algebra & Combinatorics, Number Theory, Freshman Studies I, II

- Tutorials at Lawrence: Elementary Number Theory, Commutative Algebra, Algebraic Curves, Putnam Problems, Linear Algebra, Quantum Computing, *Gödel, Escher, Bach*

- Independent Studies at Lawrence: Area in Euclidean Geometry, Riemann Surfaces, Graphs and Riemann Surfaces, Differential Geometry, Group Theory, Combinatorial Game Theory, Group Theory and Physics, Primes of the Form $x^2 + ny^2$, Galois Theory, Symmetry in Quantum Mechanics, Symmetries of Finite Graphs, Analytic Number Theory, Algebraic Geometry, The Kronecker-Weber Theorem, Linear Programming & Economic Analysis, Module Theory, Cryptography on Graphs

## Books

- *Divisors and Sandpiles*, in progress for the Student Mathematical Library series of the AMS.

- *Symmetry and Quantum Mechanics*, Monographs and Research Notes in Mathematics, Chapman and Hall / CRC, forthcoming in late 2016.

## Publications

- *Maximal harmonic group actions on finite graphs*, Discrete Mathematics, **338**, No. 5 (2015), 784-792.

- *Harmonic Galois theory for finite graphs*, in "Galois-Teichmüller Theory and Arithmetic Geometry" (H. Nakamura, F. Pop, L. Schneps, A. Tamagawa eds.), Advanced Studies in Pure Mathematics, **63** (2012), 121-140.

- *Genus bounds for harmonic group actions on finite graphs*, Int. Math. Res. Notices, **2011**, No. 19 (2011), 4515-4533.

- *Galois covers of the open p-adic disc*, manuscripta math., **131**, No. 1-2 (2010), 43-61.

- *The pro-p Hom-form of the birational anabelian conjecture* (with F. Pop), J. Reine Angew. Math (Crelle's Journal), **628** (2009), 121-127.

- *A Hom-form of the pro-p birational anabelian conjecture*, extended abstract of talk at the Oberwolfach workshop "Arithmetic and Differential Galois Groups," published in Mathematisches Forschungsinstitut Oberwolfach Report No. 26/2007.

- *Arithmetic and geometry of the open p-adic disc*, Ph.D. dissertation, University of Pennsylvania, May 2007.

- *Hilbert functions of finite group orbits: abelian and metacyclic groups*, Senior thesis, Reed College, May 2001.

## Talks

- *Chip-firing Games on Graphs*, March 2014
  Colloquium, St. Norbert College

- *Chip-firing Games on Graphs*, February 2014
  Science Hall Colloquium, Lawrence University

- *Harmonic Group Actions, Genus Bounds, and Combinatorial Maps*, January 2014
  Special Session on Tropical and Nonarchimedean Analytic Geometry at the AMS/MAA Joint Meetings, Baltimore

- *Harmonic Group Actions on Finite Graphs*, July 2013
  Generalizations of Chip-Firing and the Critical Group, American Institute of Mathematics, Palo Alto

- *Graph-theoretic Hurwitz Groups*, March 2013
  Combinatorics Seminar, University of Minnesota

- *Finite Graphs and Riemann Surfaces: Hurwitz groups and graphs*, November 2012
  Colloquium, Reed College

- *Symmetry: an example from graph theory*, November 2011
  Science Hall Colloquium, Lawrence University

- *Harmonic Galois theory for finite graphs*, February 2011
  Galois Seminar, University of Pennsylvania

- *Galois branched covers of finite graphs*, October 2010
  Galois-theoretic Arithmetic Geometry, International Inst. for Advanced Study (Kyoto)

- *The pro-p Hom-form of the birational anabelian conjecture*, August 2009
  Anabelian Seminar, Isaac Newton Institute for Math. Sciences (Cambridge, UK)

- *Galois Theory and Rational Points on Curves*, April 2009
  Colloquium, University of Wisconsin – Oshkosh

- *Arithmetic and Geometry: $\frac{2}{7}$ of the liberal arts*, March 2008
  Mortar Board "First Chance / Last Chance Lecture", Lawrence University

- *A Hom-form of the pro-p birational anabelian conjecture*, May 2007
  Oberwolfach Workshop "Arithmetic and Differential Galois Groups"

- *Galois Theory: To Infinity and Beyond*, February 2007
  Earlham College

- *Galois Theory: To Infinity and Beyond*, January 2007
  Lawrence University

- *Galois covers of the open p-adic disc*, January 2007
  Special Session on Arithmetic Geometry at the AMS/MAA Joint Meetings, New Orleans

- *Galois covers of the open p-adic disc*, December 2006
  Galois Seminar, University of Pennsylvania (2 talks)

- *Arithmetic and geometry of the open p-adic disc*, April 2006
  Galois Workshop, University of Pennsylvania

- *What is Galois Theory?*, April 2006
  Colloquium, Lycoming College

### Conferences Attended

- Sandpile Groups, BIRS-CMO (Oaxaca), November 2015

- AMS/MAA Joint Meetings, Baltimore, January 2014

- Generalizations of Chip-Firing and the Critical Group, American Institute of Mathematics, July 2013

- Galois-theoretic Arithmetic Geometry, IIAS (Kyoto), October 2010

- Introductory Workshop: *Non-Abelian Fundamental Groups in Arithmetic Geometry*, Isaac Newton Institute for Math. Sciences (Cambridge, UK), July 2009

- Miniconference on Pro-$p$ Groups in Number Theory, University of Wisconsin – Madison, April 2008

- P-adic Methods and Rational Points, Renyi Institute (Budapest), May 2007

- Arithmetic and Differential Galois Groups, Oberwolfach, May 2007

- AMS/MAA Joint Meetings, New Orleans, January 2007

- Galois Workshop, University of Pennsylvania, April 2006

- Deligne's 61st Birthday Conference, Institute for Advanced Study, October 2005

- Arizona Winter School, University of New Mexico, March 2005
  Leila Schneps working group on multizeta values

### Professional Memberships

- American Mathematical Society (AMS)

- Association for Women in Mathematics (AWM)

- Mathematical Association of America (MAA)

### Professional Service

- Referee for journals such as Advances in Applied Mathematics, Ars Mathematica Contemporanea, Discrete Mathematics, and European Journal of Combinatorics.

- Reviewer for Zentralblatt MATH