Andrew Obus

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Employment

2011 – 2012	Visiting researcher, Max-Planck-Insitut Für Mathematik
2009 – 2013	NSF Postdoctoral Fellow, Columbia University (Supervisor: Aise Johan de Jong)
2003 – 2004	Quantitative Analyst, D. E. Shaw & Co.

Education

2004 – 2009	Ph.D., Mathematics, University of Pennsylvania (Advisor: David Harbater. Thesis: *Ramification of primes in fields of moduli of three-point covers*)
1999 – 2003	A.B., Mathematics, Harvard College, *magna cum laude*, Phi Beta Kappa (Advisor: Benedict Gross. Thesis: *The trace formula for* $\Gamma_0(N)$)

Accepted publications[1]

1. The (local) lifting problem for curves. *Proceedings for Conferences in Kyoto (October 2010) "Galois-Teichmüller theory and Arithmetic Geometry,"* (Hiroaki Nakamura, Florian Pop, Leila Schneps, Akio Tamagawa, eds.), to appear, 54 pp.
2. Fields of moduli of three-point G-covers with cyclic p-Sylow, I. *Algebra Number Theory*, to appear, 42 pp.
3. Toward Abhyankar's inertia conjecture for $PSL_2(\ell)$. *Proceedings of the 2010 Luminy Meeting "Groupes de Galois géométriques et différentiels,"* to appear, 9 pp.
4. Vanishing cycles and wild monodromy. *Int. Math. Res. Notices*, *Int. Math. Res. Notices*, Vol. 2012, No. 2, 299–338.
5. Wild tame-by-cyclic extensions. (with Rachel Pries) *J. Pure Appl. Algebra* **214** (2010), no. 6, 565–573.

Submitted papers

1. Cyclic Extensions and the Local Lifting Problem (with Stefan Wewers), 49 pp.
2. Conductors of wild extensions of local fields, especially in mixed characteristic $(0, 2)$. 11 pp.
3. On Colmez's product formula for periods of CM-abelian varieties. 13 pp.
4. Fields of moduli of three-point G-covers with cyclic p-Sylow, II. 50 pp.

Honors and Awards

2009 –	NSF Mathematical Science Postdoctoral Research Fellowship
2006 – 2009	NDSEG Graduate Research Fellowship
2009	Carlitz-Zippin Prize (for an exceptional Ph. D. Thesis), University of Pennsylvania
2006	Honorable Mention, Penn Prize for Excellence in Teaching by Graduate Students
2005, 2007	Good Teaching Award, University of Pennsylvania.
2004 – 2009	Calabi Fellowship, University of Pennsylvania
2001, 2002	Certificate of Distinction in Teaching, Harvard University
2000 – 2002	John Harvard Scholarship, Harvard University
2000	Detur Book Prize, Harvard University
1997 – 1999	United States of America Mathematical Olympiad, Qualifier (Honorable Mention for high score, 1998)

[1] All papers and preprints available at www.math.columbia.edu/∼obus

Talks

2012	Feb.	Winter School on Galois Theory, Luxembourg
	Feb.	U.S. Naval Academy, Colloquium
	Jan.	RWTH Aachen University, Constructive and Experimental Algebra Colloquium
2011	Dec.	Universität Heidelberg, Algebra and Number Theory Seminar
	Nov.	Max-Planck-Institut Für Mathematik, Number Theory Lunch Seminar
	Apr.	Columbia University, Algebraic Geometry Seminar
	Mar.	University of Wisconsin-Madison, Number Theory Seminar
	Mar.	University of Pennsylvania, Galois Seminar
	Feb.	Wesleyan University, Algebra Seminar
2010	Nov.	Haverford and Bryn Mawr Colleges, Bi-Co Colloquium
	Oct.	Harvard University, Number Theory Seminar
	Oct.	Conference on Galois Theory and Arithmetic Geometry, IIAS Kyoto
	Jul.	Universität Ulm, Algebraic Geometry Seminar
	Jun.	Leibniz Universität Hannover, Algebraic Geometry Seminar
	Apr.	University of Pennsylvania, Galois Seminar
	Mar.	Conference on Geometric and Differential Galois Theory, CIRM, Luminy
	Mar.	CUNY Graduate Center, Number Theory Seminar
	Feb.	Colorado State University, Colloquium
	Feb.	Colorado State University, Algebra Seminar
2009	Oct.	AMS Special Sessions, Florida Atlantic University, "Arithmetic Geometry"
	Oct.	Columbia University, Algebraic Geometry Seminar
	Jul.	Journées de Géométrie Arithmetique de Rennes (poster)
	Feb.	Conference on Arithmetic of Fields, Oberwolfach
	Jan.	University of Georgia, Number Theory/Arithmetic Geometry Seminar
	Jan.	AMS Special Session, Washington DC, "Group Actions on Curves"
2008	Nov.	University of Pennsylvania, Galois Seminar
2007	Mar.	Arizona Winter School Project Group, "Berkovich Spaces"
2005 – 2008		University of Pennsylvania, various seminars, 15 expository talks

Teaching Activities[2]

2011	Spring	Instructor, Columbia University, Linear Algebra (Evaluation: 4.47/5)
2011	Spring	Instructor, Columbia University, Introduction to Higher Mathematics (Evaluation: 4.70/5)
2009	Fall	Instructor, Columbia University, Calculus II (two sections, Evaluation: 4.74/5)
2007	Fall	Teaching Assistant, University of Pennsylvania, Calculus III (Evaluation: 3.79/4)
2007	Summer	Instructor, University of Pennsylvania, Calculus I (Evaluation: 3.59/4)
2006	Spring	Grader, University of Pennsylvania, Algebra (graduate level)
2005	Fall	Teaching Assistant, University of Pennsylvania, Calculus II (Evaluation: 3.79/4)
2005	Summer	Instructor, University of Pennsylvania, Advanced Linear Algebra (Evaluation: 3.63/4)
2002	Summer	Course Assistant, Harvard University, Calculus II
2002	Spring	Course Assistant, Harvard University, Calculus II
2001	Fall	Course Assistant, Harvard University, Calculus II
2004 – 2007		Staffer, Walk-in Help Center, University of Pennsylvania
1997 – 2009		Extensive Private Tutoring

[2] Anonymous student comments from Columbia University available at `http://culpa.info/professors/9790`.

Service (University Level)

2012	Assistant at Arizona Winter School (problem sessions)
2010 –	Referee for *Algebra and Number Theory*, *Glasgow Mathematical Journal*, *Proceedings of the AMS*, various conference proceedings
2010 –	Reviewer, *Zentralblatt*
2009 – 2010	Columnist, AMS Graduate Student Blog
2009	Mentored undergraduate math major, supervised seminar talk.
2009	Compiler of *Oberwolfach Reports* for the conference "The Arithmetic Of Fields"
2008	Served on a committee to introduce an Undergraduate Mathematics Seminar at UPenn, with talks given by undergraduates.
2008	Along with Asher Auel and Shea Vela-Vick, spearheaded the development of UPenn's Math 116/260, a rigorous introduction to calculus, first offered in Fall 2008.
2007 – 2008	Mentored undergraduate math major, now attending graduate school in mathematics.

Service (K-12 Level)

2011	Along with Michael Frank and Alison Kamhi, organized and ran two-week workshop in Liberia for science and math teachers.
2011	Mentored high school math student, supervised expository paper.
2010 – 2011	Mentored 5th grade student with strong interest in math.
2010 – 2011	Spoke to each of the 5th grade classes at Hunter College Elementary School about open problems in mathematics.
2010	Lectured to New York Math Circle (high school) on the life and mathematics of Évariste Galois.