Alexander G. M. Paulin– Curriculum Vitae

Department of Mathematics
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Nationality: British
Date of birth: 5 August 1982

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Employment

2008–Present Morrey Assistant Professor, UC Berkeley

Education

2004–2008 D.Phil. Imperial College London
Supervisor: Kevin Buzzard

2003–2004 Certificate of Advanced Study in Mathematics (Part III), Distinction, Queens' College, Cambridge University

2000–2003 B.A. Mathematics, First class, Queens' College, Cambridge University

Grants and Awards

2009–2011 NSF Award: ID 0901603

2004–2008 EPSRC Studentship, Imperial College London

2006 Cecil King Travel Scholarship

Research Interests

Number theory and its connections with geometry and representation theory. I am interested in the p-adic and geometric aspects of the Langlands philosophy. My work is largely focused on the study of eigenvarieties, the p-adic local Langlands correspondence and the theory of *arithmetic* $\mathcal{D}$-modules.

Papers and Preprints — http://math.berkeley.edu/∼apaulin/

Local to Global Compatibility on the Eigencurve
to appear in the Proceedings of the London Mathematical Society.

Geometric Level Raising and Lowering on the Eigencurve
to appear in Manuscripta.

Properness of the Eigencurve and Trianguline Representations
In preparation

p-adic Geometric Class Field Theory
submitted.

Presentations

Sept 2010	*Number Theory Seminar*, Berkeley
Dec 2009	*Number Theory Seminar*, Berkeley
May 2009	*Number Theory Seminar*, Stanford
Oct 2008	*Number Theory Seminar*, Santa Cruz
Sept 2008	*Number Theory Seminar*, Berkeley
Mar 2008	*Number Theory Seminar*, Bristol
Oct 2007	*Number Theory Seminar*, Cambridge
July 2007	*Number Theory Seminar*, Munster
Feb 2007	*Number Theory Seminar*, Kings College London
Feb 2006	*Taylor's Number Theory Seminar*, Harvard

Teaching

UC Berkeley

Autumn 2010	Abstract Algebra
Spring 2010	Honors Multivariable Calculus
Autumn 2009	Number Theory (Graduate Course) and Abstract Algebra
Spring 2009	Abstract Algebra (*two classes*)
Autumn 2008	Honors Linear Algebra and Differential Equations

Imperial College London

2005 - 2008 Supervised numerous revision classes on courses in analysis, linear algebra and group theory.

Cambridge University

2004 Supervised two pairs of first year undergraduates in the course Numbers and Sets.

Service

Supervisor of independent study reading groups in elliptic curves, automorphic representations, smooth representations of p-adic reductive groups and commutative algebra at UC Berkeley.

Supervisor for a summer internship of an IDEAL scholar, where we studied the representation theory of finite groups.

Supervision of three senior undergraduate theses at UC Berkeley.

Reviewing for International Mathematical Research Notices and Mathematical Research Letters.

Referees

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