PETER LATHAM

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EDUCATION

University of East Anglia   October 2013 – August 2016
PhD in Mathematics

Supervised by Prof. Shaun Stevens.
Thesis title: *On the unicity of types for representations of reductive p-adic groups.*

University of Manchester   September 2009 – June 2013
MMath in Mathematics with first class honours

Thornton Grammar School   September 2002 – June 2009
Secondary education

EMPLOYMENT

King's College London   September 2016 – Present
Heilbronn Research Fellow

University of East Anglia   October 2013 – August 2016
Associate Tutor

RESEARCH INTERESTS

Broadly speaking, I am interested in algebraic number theory, representation theory, and arithmetic geometry. My particular interests are in the theory of types for representations of reductive p-adic groups, the inertial Langlands correspondence, and deformations of Galois representations.

PUBLICATIONS

- Unicity of types for supercuspidal representations of p-adic $\mathbf{SL}_2$. *J. Number Theory* 162 (2016), 376-390.

- The unicity of types for depth zero supercuspidal representations. *Represent. Theory* 21 (2017), 590-610.

- On the unicity of types for special linear groups. *Manuscripta Math.* 157, issue 3-4 (2018), 445-465.

- On the unicity of types for toral supercuspidal representations (joint with Monica Nevins). To appear in the proceedings of the conference *Representation theory of p-adic groups*, July 2017 at IISER Pune, India.

TEACHING EXPERIENCE

- During the 2015–2016 academic year I supervised a master's and first year PhD-level learning group on local fields and local class field theory.

- Throughout my time at UEA, I regularly supervised tutorials for a wide range of pure mathematical topics, including calculus, number theory, topology, group theory, ring theory, linear algebra and real analysis. I also marked coursework for each of these modules.

INVITED TALKS

- 26 May 2017, Ottawa pure mathematics colloquium: *Towards an explicit local Langlands correspondence.*

- 23 May 2017, Ottawa algebra seminar: *Congruences between tame Langlands parameters.*

- 9 November 2016, CIRM Luminy: *The tame inertial Langlands correspondence.*

- 13 October 2016, Séminaire groupes, algèbre et géométrie, Université de Poitiers: *The unicity of types in depth zero.*

- 7 December 2015, Pure mathematics seminar, University of East Anglia: *Unicity of types for* $\mathbf{SL}_N$.

- 13 April 2015, TCC number theory day, Imperial College London: *Types and the inertial Langlands correspondence.*

ATTENDED CONFERENCES AND RESEARCH VISITS

- Research in pairs: Unicity of types for tamely ramified supercuspidal representations (joint with Monica Nevins), CIRM Luminy, 30 April – 11 May 2018.

- New developments in automorphic forms, IMUS Sevilla, 23–27 April, 2018.

- University of Ottawa, visiting Monica Nevins, 22–26 May, 2017.

- Representation theory of finite and p-adic groups of Lie type, CIRM Luminy, 7–10 November 2016.

- Université de Poitiers, visiting Paul Broussous, 12–14 October, 2016.

- Automorphic forms: theory and computation, King's College London, 5–9 September, 2016.

- Introduction to relative aspects in representation theory, Langlands functoriality and automorphic forms, CIRM Luminy, 16–20 May, 2016.

- Algebraisation and Geometrisation in the Langlands programme, Bristol University, 29 March – 1 April, 2016.

- Workshop on categorification in the representation theory of reductive p-adic groups, University of East Anglia, 4–8 January, 2016.

- Representation theory, number theory and invariant theory, Yale University, 1–5 June, 2015.

- Winter meeting on Bruhat–Tits buildings, Imperial College London, 6–9 January, 2015.

- Summer school and conference on the Gan–Gross–Prasad conjectures, Université Jussieu, 18–27 June, 2014.

MISCELLANEOUS

- At UEA, I was part of a team which produced an English translation of David Renard's book *Représentations des groupes réductifs p-adiques.*

REFERENCES

Shaun Stevens	Monica Nevins	David Helm
School of Mathematics	Department of Mathematics	Department of Mathematics
University of East Anglia	University of Ottawa	Imperial College London
Norwich, UK	Ottawa, Canada	London, UK
`shaun.stevens@uea.ac.uk`	`mnevins@uottawa.ca`	`dhelm@imperial.ac.uk`