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**Address**

Department of Mathematics and Statistics, McGill University  
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*Professional Experience*

- Postdoctoral Fellow**, McGill University **August 2017 – August 2018**  
 Supervisors: Dmitry Jakobson and Maksym Radziwiłł.
- Postdoctoral Fellow**, KTH Royal Institute of Technology **May 2016 – July 2017**  
 Supervisor: Pär Kurlberg.

*Education*

- University College London**, PhD Candidate in Pure Mathematics **2011–2015**  
 Thesis titled *Quantum Limits, Counting and Landau-type Formulae in Hyperbolic Space* supervised by Dr. Yiannis Petridis.
- University College London**, Mathematics MSci, 80% **2007–2011**  
 Master's project titled *Discrete Mean Values of Dirichlet  $L$ -functions* supervised by Dr. Yiannis Petridis (Grade 95%).

*Research Interests*

Spectral theory of automorphic forms, hyperbolic lattice point problems and equidistribution, Quantum Unique Ergodicity and quantum chaos, classical analytic number theory.

*Publications and Preprints*

- On the Value Distribution of Two Dirichlet  $L$ -functions**, Joint with Y. Petridis **2017**  
 Funct. Approx. Comment. Math., advance publication, 5 May 2017, [doi:10.7169/facm/1640](https://doi.org/10.7169/facm/1640), [arXiv:1505.00623](https://arxiv.org/abs/1505.00623).
- Lattice Point Counting in Sectors of Hyperbolic 3-space** **2017**  
 Q. J. Math, 27 February 2017, [doi:10.1093/qmath/hax004](https://doi.org/10.1093/qmath/hax004), [arXiv:1511.00580](https://arxiv.org/abs/1511.00580).
- Numerical Investigation of Exponential Sums Over Eigenvalues in  $\mathrm{PSL}_2(\mathbb{Z}) \backslash \mathbb{H}$**  **2016**  
 Appears in *Local Average in Hyperbolic Lattice Point Counting, With an Appendix by Niko Laaksonen*, Math. Z, [doi:10.1007/s00209-016-1749-z](https://doi.org/10.1007/s00209-016-1749-z), [arXiv:1408.5743](https://arxiv.org/abs/1408.5743).
- Discrete Mean Values of Dirichlet  $L$ -functions**, Joint with Y. Petridis **2011**  
 In *The Analytic Theory of Automorphic Forms, Oberwolfach Rep.*, **8**, no. 3, 2011.

*Awards and Achievements*

- UCL Faculty of Mathematical and Physical Sciences Postgraduate Research Prize** **2016**  
 Awarded for outstanding achievements to one candidate among the PhD graduates across the whole faculty.
- 150th Anniversary Postdoctoral Mobility Grant**, London Mathematical Society **2015**  
 To visit Professor Morten Risager at University of Copenhagen.
- Mayer de Rothschild Award in Pure Mathematics**, UCL **2014–2015**  
 Departmental prize for excellence in research.
- Davenport Prize in Pure Mathematics**, UCL **2012**  
 Departmental prize for excellence for first year PhD students.

- SET Award, Finalist** 2011  
Shortlisted as one of the final three students for the European Science and Engineering Student of the Year Award in the Mathematics category.
- Dean's Summer Student Scholarship, UCL** Summer 2009  
A funded scholarship to work on a project titled *Discrete Modelling for Complex Systems* supervised by Professor Steven Bishop.

### Teaching Experience

- Multivariable Calculus, SF1626, KTH** 2017  
Teaching assistant to two groups for a first year multivariable calculus course. Consisted of 12 hours weekly split between tutorials and problem classes, also marked homework scripts, quizzes and exams.
- Linear Algebra for Joint Honours, MATH1203, UCL** 2012–2014  
Lectured the course for 2 years to first year undergraduates, prepared problem sheets and exams. Wrote comprehensive electronic lecture notes that are still being used.
- Teaching Assistant, UCL** 2011–2015  
Taught small tutorials, problem classes, and marked homework scripts and exams.

### Talks

- Mean Values of  $L$ -functions and Landau's Formula, KTH** 9 December 2016  
DNA seminar.
- Lattice Point Counting in Sectors of Hyperbolic Space, University of Copenhagen** 18 November 2016  
Invited speaker in the workshop for Spectral Theory, Automorphic Forms and Arithmetic.
- Hyperbolic Lattice Point Counting, Aalto University** 9 March 2016  
Algebra, Number Theory and Applications seminar.
- Lattice Point Counting in Sectors of Hyperbolic Space, University of Copenhagen** 6 November 2015  
Joint Number theory / Geometry and analysis seminar.
- Applications of Landau's Formula** 16 February 2015  
The 8th Young Mathematicians Conference on Zeta Functions at Nagoya University, Japan.
- Exponential Sums Over Eigenvalues of  $\Delta$  in  $\mathrm{PSL}_2(\mathbb{Z}) \backslash \mathbb{H}$**  8 July 2014  
Building Bridges: 2nd EU/US Workshop on Automorphic Forms and Related Topics at University of Bristol.
- Numerical Investigation of Exponential Sums in  $\mathrm{PSL}_2(\mathbb{Z}) \backslash \mathbb{H}$ , UCL Postgraduate Seminar** 24 April 2014
- Quantum Unique Ergodicity, UCL Postgraduate Seminar** 22 November 2012
- Prime Number Theorem, St. Olave's Grammar School** 27 March 2012
- Mean values of Dirichlet  $L$ -functions, UCL Postgraduate Seminar** 16 March 2012
- Approximate Functional Equation for  $L(s, \chi)$ , London Number Theory Study Group** 1 February 2012
- Quantum Chaos, UCL Maths Undergraduate Colloquium** January 18th 2011
- Nevanlinna Theory, UCL Maths Undergraduate Colloquium** October 26th 2010

*Service***Referee**

Refereeing a paper for Involve journal.

**Maths and Stats Programming Club, UCL****2014–2015**

Assisting in the Mathematics and Statistics Departments' joint programming club.

**Modular Forms Study Group, UCL****Spring 2011**

Organised a study group on modular forms for undergraduates.

**UCL Maths Undergraduate Colloquium, UCL****2010–2011**

Helped organise the undergraduate colloquium.

*Additional Information*

- Native Finnish, fluent English, moderate Swedish and Japanese, satisfactory German.
- Finnish National Service in summer 2006 – summer 2007. Completed the Reserve Officer School of Hamina in winter 2006. Current rank reserve 2nd Lieutenant.