

Shyam A. Popat

Email: shyam.popat@queens.ox.ac.uk

Last Updated: February 20, 2025

EDUCATION

- **DPhil candidate in Mathematics of Random Systems CDT** **September 2021 - August 2025**
University of Oxford- Oxfordshire
 - DPhil title: Fluctuations in SPDEs and Interacting Particle Systems, (supervisors: Dr Benjamin Fehrman, Prof. Ben Hambly).
 - Travelled for a four month research exchange to Freie Universität, Berlin, to visit Prof. Nicolas Perkowski. Worked on a project related to energy solutions of singular SPDEs (March 2024 - July 2024).
- **BSc MMORSE (Hons)- Statistics with Mathematics stream** **October 2017 - July 2021**
University of Warwick- Coventry
 - First class with Honors - 80% overall.
 - Statistics Masters Dissertation title: The expected signature of a random path: properties and applications (supervisor: Dr Anastasia Papavasiliou).

PUBLICATIONS AND PREPRINTS

- **Shyam Popat.** A central limit theorem and large deviations principle for the generalised Dean–Kawasaki equation on a bounded domain. In preparation and available upon request.
- Lukas Gräfner, Nicolas Perkowski, and **Shyam Popat.** Energy solutions of singular SPDEs on Hilbert spaces with applications to domains with boundary conditions. Submitted to Stochastics and Partial Differential Equations: Analysis and Computations, 2024.
- **Shyam Popat.** Well-posedness of the generalised Dean–Kawasaki equation with correlated noise on bounded domains. Stochastic Processes and their Applications, 179:104503, 2025.

RECENT TALKS

- *A Central Limit Theorem for the generalised Dean–Kawasaki equation.*
Oxford Junior Probability seminar,
Oxford, UK (13/02/2025).
- *A Central Limit Theorem for the generalised Dean–Kawasaki equation.*
Imperial College London Junior Analysis seminar,
London, UK (22/01/2025).
- *Working towards a central limit theorem for the Dean–Kawaski equation.*
20th Oxford-Berlin Young Researchers Meeting on Applied Stochastic Analysis
Oxford, UK (09/12/2024).
- *Working towards a central limit theorem for the Dean–Kawaski equation.*
Mathematics of Random Systems CDT Workshop
London, UK (06/11/2024).
- *Generalised Dean–Kawasaki equation with correlated noise on bounded domains.*
Berlin-Oxford Summer School in Mathematics of Random Systems.
Oxford, UK (11/09/2024).

- *Well-posedness of the Dean-Kawasaki equation with correlated noise on bounded domains.*
19th Annual Berlin-Oxford Young Researchers Meeting on Applied Stochastic Analysis
Berlin, Germany (25/06/2024).

UNIVERSITY TEACHING EXPERIENCE

- **Teaching Assistant, Tutor** **January 2022 - August 2025**
Mathematics Department - Oxford University
Taught seminar classes and marked assignments for third and fourth (Masters) year courses for the Mathematical Institute, and first and second year courses as St Edmund Hall college and Exeter college.
 - Autumn 2023 - Teaching Assistant for B4.1: Functional Analysis I (2 classes)
 - Autumn 2023 - Marker for C4.3: Functional Analytic Methods for PDEs (2 classes).
 - Spring 2023 - Tutor for M1: Groups and Group Actions (1 class, St Edmund Hall college)
 - Spring 2023 - Tutor for M4: Constructive Mathematics (1 class, St Edmund Hall college)
 - Winter 2023 - Tutor for C8.2: Stochastic Analysis and PDEs (1 class)
 - Winter 2023 - Teaching Assistant for C8.2: Stochastic Analysis and PDEs (2 classes)
 - Autumn 2022 - Teaching Assistant for MCF Stochastic Calculus (2 classes)
 - Autumn 2022 - Teaching Assistant for C4.3: Functional Analytic Methods for PDEs (2 classes)
 - Spring 2022 - Teaching Assistant for M5: Fourier Series and PDEs (1 class, Exeter college)
 - Spring 2022 - Teaching Assistant for M2: Analysis II - Continuity and Differentiability (1 class, Exeter college)
 - Winter 2022 - Teaching Assistant for M2: Analysis III - Integration (1 class, Exeter college)
- **Graduate teaching assistant, Associate Tutor** **October 2020 - July 2021**
Statistics department - University of Warwick
Taught seminar classes and marked assignments for first and second year courses. Teaching resit students over the summer online via MS Teams (due to Covid-19).
 - Summer 2022 - Tutor for ST218- Mathematical Statistics part A (2 classes, online for re-sitting students)
 - Summer 2022 - Tutor for ST115- Introduction to Probability (2 classes, online for re-sitting students)
 - Winter 2021 - Teaching Assistant and Tutor for ST115- Introduction to Probability (2 classes)
 - Autumn 2020 - Teaching Assistant and Tutor for ST116- Mathematical Techniques (2 classes)

ACADEMIC PRIZES AND AWARDS

- Approx. £100,000 - EPSRC scholarship for DPhil, covering tuition fees and maintenance for 4 year PhD (Oxford, 2021-2025).
- £2,656 Warwick Statistics Senior Scholarship (for Masters) on the basis of academic merit (Warwick, 2019-20).
- £1800 Over all three years of undergraduate degree on the basis of academic merit (Warwick, 2017-20).

SELECTED WORK EXPERIENCE

- Co-organiser of JRSOC conference in Berlin, [click here for conference details](#) .
- Research Internship at STOR-i CDT in Lancaster University. Title: Point Processes on Categorical Data, (supervisor: Jess Gillam) (2019, summer).
- CDT Mini Research Project: worked with BBC to develop machine learning (NLP) algorithm for scoring articles (May 2022, 2 weeks).
- Currently sit on the Oxford Maths Consultative Committee for Graduates (2021- present).