
CURRICULUM VITAE

Alan Hammond

Departments of Mathematics and Statistics
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Date of birth: 17th September 1976.

Citizenship: United Kingdom.

Position: Professor, Departments of Mathematics and Statistics, U.C. Berkeley.

Research interests:

Probability theory and the rigorous theory of statistical mechanics: random models of phase boundaries; probabilistic and geometric analysis of randomly growing interfaces and Kardar-Parisi-Zhang universality; discrete models of phase transition; kinetic limits of randomly evolving systems of particles, and analysis of PDE arising in these limits; random walk in random environment; self-avoiding walk; and noise sensitivity.

Tertiary education:

2005: PhD, U.C. Berkeley, Department of Statistics. *Advisors:* Yuval Peres and Fraydoun Rezakhanlou.

2001: MSc by Research, University of Oxford. *Advisor:* Terry Lyons.

1999: C.A.S.M. in Mathematics (Part III: Distinction), University of Cambridge.

1998: B.A. in Mathematics (Parts I and II: Class I), University of Cambridge.

Employment:

- 2019–: Professor, Departments of Mathematics and Statistics, U.C. Berkeley.
- 2014–2019: Associate Professor, Departments of Mathematics and Statistics, U.C. Berkeley.
- 2010–2014: EPSRC Career Acceleration Fellowship hosted at the Department of Statistics, University of Oxford; invited scientific collaborator at the University of Geneva during 2012–13.
- 2009–2010: University Lecturer with Tutorial Fellowship, at the Department of Statistics and St. Hugh's College, University of Oxford.
- 2008–2009: Visitor to École Normale Supérieure in Paris, supported by NSF PIRE grant held by New York University.
- 2006–2009: Courant Instructor, Courant Institute of Mathematical Sciences, New York University.
- 2005–2006: Postdoctoral fellow, University of British Columbia, Department of Mathematics.

Awards:

2021: Simons Fellow in Mathematics.

2021: MSRI Research Professor for the Fall 2021 program 'Universality and Integrability in Random Matrix Theory and Interacting Particle Systems'.

2021: Fellow of the Institute of Mathematical Statistics.

2019: Miller Research Professor in the Miller Institute for Basic Research in Science at U.C. Berkeley.

2019: P.I. of NSF grant DMS 1855550, 'Fractal Geometry for Dynamics on Random Media'.

2015: P.I. of NSF grant DMS 1512908, 'Random Motion in Disordered Media: Surface Growth, Ballisticity, and Trapping'.

2010: P.I. of U.K. EPSRC Career Acceleration grant EP/I004378/1, 'Constrained random geometries: phase boundary fluctuation and sub-ballistic motion'.

2008: Co-P.I. of NSF grant DMS 0806180, 'Slow Dynamics in Random Media'; P.I. Gérard Ben Arous.

2000: Domus Graduate Scholarship (Competition B), Merton College, Oxford.

Invitations since 2015 include:

- Plenary address at the 38th Conference on Stochastic Processes and their Applications, University of Oxford, July 2015.
- Plenary address at the Frontier Probability Days conference held at the University of Utah in May 2016.
- The Minerva Lectures 'Universality in models of local random growth via Gibbs resamplings' at Columbia University in February–March 2019, with accompanying lecture notes.
- Key participant at the Kavli Institute for Theoretical Physics at U.C. Santa Barbara, January to March 2016.
- Seminar and workshop talks at the Rényi Institute in Budapest, MIT, NYU, Stanford University, Northwestern University and the University of Chicago; Oberwolfach in July–August 2015; at the Centre International de Rencontres Mathématiques, Luminy, near Marseille, in September 2019; and at the CMI-HIMR Integrable Probability Online Summer School in July 2020.

Mentorship:

- Advised PhD student Sourav Sarkar, who graduated in 2019 from the Department of Statistics at U.C. Berkeley and now holds a Lecturership at the University of Cambridge.
- Advised PhD student Milind Hegde, who graduated in 2021 from the Department of Mathematics at U.C. Berkeley and now holds a postdoctoral fellowship at Columbia University.
- In 2015–2017, mentored NSERC-supported postdoctoral scholar Tyler Helmuth, now an Assistant Professor at the University of Durham, UK.
- In 2016–2018, mentored Miller postdoctoral fellow Shirshendu Ganguly, now an Associate Professor in the Department of Statistics at U.C. Berkeley.
- In 2019–2020, mentored NSF-supported postdoctoral scholar Erik Bates, now a postdoctoral fellow at the University of Wisconsin, Madison.
- Advise PhD student Jacob Calvert with graduation anticipated for Spring 2022.

Service:

- The Eighth Pacific Rim Conference in Mathematics. With Fraydoun Rezakhanlou, I acted as local organizer for this international mathematical conference which we planned to hold on the U.C. Berkeley campus in August 2020 but which we took online in light of the COVID-19 pandemic. Working with a Scientific Committee representing institutions in nine countries around the Pacific Rim, we organized the event via Zoom from 3rd to 11th August 2020, holding ten sessions with nine plenary and over forty session speakers. There were more than 1200 registrants and audience numbers were typically between 50 to 100 for session talks and 80 to 150 for plenary addresses. Supported by funding from the Department of Mathematics at U.C. Berkeley, and aided by valuable support from Erik Bates and Milind Hegde, the conference is now recorded on its YouTube channel, on which most of the talks appear.

- Scientific advisor for the four-week workshop 'Growing random surfaces' at the International Centre for Theoretical Sciences, Bangalore, in January 2019.
- Organizer for several semesters of the U.C. Berkeley probability seminar; member of faculty and postdoctoral recruitment committees in the Department of Mathematics at U.C. Berkeley; member of the A.M.S.-Simons Travel Grants Committee for 2018-2020; taught three semester-long graduate topics classes in the Department of Statistics at U.C. Berkeley since 2014 on such topics as self-avoiding walk and KPZ universality.