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Career history

from 10/2017	Chair in Probability and Stochastic Analysis Imperial College London.
04/2014 – 10/2017	Regius Professor of Mathematics The University of Warwick.
01/2010 – 04/2014	Full Professor The University of Warwick.
01/2009 – 01/2010	Associate Professor New York University (Courant institute).
09/2007 – 01/2009	Associate Professor (Reader) The University of Warwick.
09/2006 – 09/2007	Associate Professor The University of Warwick.
10/2004 – 09/2006	Lecturer / Assistant Professor The University of Warwick.
10/2003 – 10/2004	Advanced Fellowship (from the Swiss NSF) Mathematics Research Centre, University of Warwick.
10/2002 – 10/2003	Postdoctoral Fellowship (from the Swiss NSF) Mathematics Research Centre, University of Warwick.

Education

November 2001	PhD in Physics – University of Geneva.
October 1998	MSc in Physics – University of Geneva.
July 1998	BSc in Mathematics – University of Geneva.
June 1994	High School Diploma – Collège Claparède, Geneva.

Honours and awards

- 2008 LMS Whitehead prize
- 2008 Philip Leverhulme Prize
- 2009 Royal Society Wolfson Research Merit Award
- 2013 Fermat prize
- Fellow of the Royal Society (since 2014)
- 2014 Fröhlich prize
- 2014 Fields medal
- Fellow of the AMS (since 2015)
- Corresponding member of the Austrian Academy of Sciences (since 2015)
- Member of the German National Academy of Sciences Leopoldina (since 2015)

- Member of the Berlin-Brandenburg Academy of Sciences and Humanities (since 2016)
- Honorary degree in science from HKBU (2016)
- Knight Commander of the British Empire (KBE; honorary since 2016, substantive since 2019)
- Foreign member of the Polish Academy of Sciences (since 2018)

Past and current PhD students

H. Singh (PhD started October 2019).
R. Steele (PhD started October 2018).
A. Gerasimovics (PhD completed December 2019).
P. Schönbauer (PhD completed October 2019).
M. Iberti (PhD completed March 2018).
K. Matetski (PhD completed April 2016).
M. Scott (PhD completed December 2014).
S. Weber (PhD completed October 2014).
S. Vollmer (PhD completed September 2013). Joint supervision with A. Stuart
D. Kelly (PhD completed December 2012).
C. Manson (PhD completed June 2010).
P. Bubak (PhD completed January 2009). Joint supervision with J. Robinson
A. Ohashi (PhD completed October 2006). Joint supervision with P. Ruffino

Supervision of postdoctoral researchers

A. Moinat (from 2019)
K. Lê (2017–2019) now research associate at TU Berlin
T. Holding (2016–2019)
G. Cannizzaro (2016–2018) now EPSRC fellow at University of Warwick
Y. Bruned (2015–2018) now lecturer at University of Edinburgh
F. Gabriel (2015–2018) now research associate at EPFL
A. Chandra (2014–2017) now lecturer at Imperial College London
H. Shen (2014–2015) now associate professor at U. Wisconsin Madison
D. Erhart (2014–2017) now associate professor at Universidade Federal da Bahia
W. Xu (2013–2016) now EPSRC fellow at Oxford University
C. Labbé (2013–2015) now MCF at Paris Dauphine
H. Weber (2010–2011) now professor at University of Bath
J. Maas (2009) now professor at IST Austria
J. Voß (2007–2009, joint with A. Stuart) now lecturer in Leeds

Named lectures

- Distinguished Lecture Series (Los Angeles by videoconference, April 2020)
- Schrödiner lecture (London, February 2020)
- Master Lectures (Sanya, December 2019)
- Pedro Nunes lecture (Lisbon, December 2019)
- Jarnik lecture (Prague, October 2019)
- Lagrange lecture (Turin, November 2018)
- Hamilton lecture (Dublin, October 2018)
- Rothschild lecture (Cambridge, September 2018)
- Simons lectures (Stony Broock, March 2018)

- Chern lectures (Berkeley, March 2018)
- Takagi lectures (Tokyo, November 2017)
- Milliman lectures (Seattle, November 2017)
- Weierstrass lecture (Paderborn, May 2017)
- Simons lectures (MIT, May 2017)
- Lewis Fry Richardson lecture (York, January 2017)
- Sackler lecture (Tel Aviv, January 2017)
- Einstein lectures (Bern, December 2016)
- Zygmund-Calderon lectures (Chicago, October 2016)
- Michalik Lecture (Pittsburgh, December 2015)
- Kai-Lai Chung Lecture (Stanford, November 2015)
- Leonardo da Vinci lecture (Milan, October 2015)
- Bernoulli lecture (Lausanne, May 2015)
- Collingwood lecture (Durham, February 2015)
- ICM Fields medal lecture (Seoul, August 2014)
- Lévy lecture (Buenos Aires, July 2014)
- IMS Medallion lecture (Sydney, July 2014)
- Euler lecture (Berlin, May 2014)
- Minerva lectures (New York, March 2014)
- Lipschitz lectures (Bonn, July 2013)

Committee memberships

- Member of the Mathematics sub-panel for REF 2021
- Member of the scientific advisory board of HCM, Bonn (2017-present)
- Chair of the programme committee of the 2022 ICM (St Petersburg)
- Member of the scientific steering committee of the Institute Henri Poincaré (Paris; 2012-present)
- Member of the scientific steering committee of the Oberwolfach Institute (2013-present)
- Member of the scientific advisory board of ETHZ-ITS (2013-2019)
- Panel member for the AFR Luxembourg (2012-2013)
- Member of the EPSRC peer review college (2006-present)
- Member of the 'commission ANR' responsible for allocating research funds for Mathematics in France (2008-2010)
- Panel member for the Early Career Research Program (USA Dept. of Energy; 2009)

Editorial duties

- Associate editor for the journal "Commun. Math. Phys" (2015-present)
- Associate editor for the journal "Probability Theory and Related Fields" (2008-2020)
- Associate editor for the "Journal of Functional Analysis" (2013-present)
- Associate editor for the journal "Annals of IHP Ser. B" (2011-present)
- Associate editor for the "Electronic Journal of Probability" (2010-2014)
- Associate editor for "Electronic Communications in Probability" (2010-2014)
- Associate editor for the journal "SPDEs: analysis and computations" (2012-present)
- Associate editor for the journal "NoDea" (2007-present)
- Associate editor for the "Journal of Mathematical Analysis and Applications" (2010-2011)

Organisation of workshops and seminars

May 2–3, 2003	*Workshop on fractional Brownian motion*, co-organiser
August 4–15, 2003	*Workshop on SPDEs and related topics*, co-organiser
July 9, 2004	*Third East Midlands Stochastic Analysis Seminar*, Warwick, co-organiser
2003 – 2007	*Organiser of the Stochastic Analysis Seminar of the University of Warwick*
July 9–13 2007	*SciCADE07* Co-organiser for two minisymposia
June 2008	*Easter Probability Meeting*, Warwick, co-organiser
July 27–31 2009	*SPA 2009* Organiser of an invited minisymposium
2010–present	*Co-organiser of the Stochastic Analysis Seminar of the University of Warwick*
January – July 2010	Organiser of a thematic semester on SPDEs at the Newton Institute (Cambridge)
2011/2012	Co-organiser of the symposium year "Probability Theory" at the University of Warwick. (Directly involved in the organisation of 4 workshops.)
July 10, 2012	*Bernoulli World Congress 2012* Organiser of a minisymposium on stochastic PDEs
January – June 2013	Co-organiser of a thematic semester on "Infinite Dimensional and Stochastic Dynamical Systems and their Applications" at the IMA (Minneapolis)
June 1–7 2014	*Stochastic Analysis* Co-organiser of an Oberwolfach workshop
July 7–11 2014	*IMS annual meeting 2014* Organiser of invited minisymposium
October 2014	*Advances in Probability: Integrability, Universality and Beyond* (Clay, Oxford), co-organiser
March 29–April 2 2016	*Probabilistic models - from discrete to continuous* (Warwick), co-organiser
May 16–20 2016	*Stochastic PDEs* (Simons centre, Stony Brook), organiser
May 28–June 3 2017	*Stochastic Analysis* Co-organiser of an Oberwolfach workshop
July 1–5 2019	*Paths between Probability, PDEs, and Physics* (Imperial College), co-organiser
June 14–19 2020	*Stochastic Analysis* Co-organiser of an Oberwolfach workshop (cancelled or postponed)

Minicourses held

March 1–2, 2007	Winter intensive course: *Hypoellipticity : Analysis & Stochastic Analysis*, Imperial College, London
July, 2007	Chinese Probability Summerschool, Wuhan, China
July 7–11, 2008	LMS Short Course Programme: *Stochastic Partial Differential Equations*, Imperial College, London
December, 2008	Necas Seminar on Continuum Mechanics, Prague
July, 2009	BMS Invited professor, Technical University, Berlin
December, 2009	Stochastic and Statistical Methods in Multi-Scale Systems, Shanghai, China
May, 2010	Evolution equations and Functional Inequalities, Hammamet, Tunisia
July, 2010	Young Researchers Workshop, Warwick, United Kingdom
October, 2010	Oberwolfach Seminar, Oberwolfach, Germany
June, 2011	Spectral properties of non-selfadjoint operators, Rennes, France
May, 2012	Ergodic theory of SPDEs, Edinburgh, UK
June, 2012	Mathematical aspects of the KPZ equation, Marseille, France
July, 2012	Rough SPDEs, Tokyo, Japan
March, 2013	Renormalisation of SPDEs, ZiF Bielefeld, Germany
March, 2013	Dynamics near criticality, ENS Paris, France
April, 2013	Renormalisation of SPDEs, Cambridge, United Kingdom
June, 2013	The KPZ equation, Rennes, France
July, 2013	Renormalisation theory and stochastic PDEs, Bonn
August, 2013	Renormalisation theory and stochastic PDEs, Brazilian summer school in probability
September, 2013	Regularity structures, ETH Zurich
February, 2014	Renormalisation and SPDEs, Part I, Toulouse, France
February, 2014	Regularity structures, Columbia University, USA
April, 2014	Introduction to Regularity structures, University of Virginia, USA
May, 2014	Renormalisation and SPDEs, Part II, Toulouse, France
July, 2014	Singular SPDEs, St Flour summer school, France
September, 2014	Regularity structures, Warwick University, UK
March, 2015	Regularity structures, Polytechnique Paris, France
May, 2015	Regularity structures, Warwick University, UK
November, 2015	Renormalisation and SPDEs, University of Pittburgh, USA
December, 2015	Renormalisation and SPDEs, Bangalore, India
July, 2016	Renormalisation and SPDEs, Barcelona, Spain
August, 2016	Renormalisation and SPDEs, ZiF Bielefeld, Germany
June, 2017	A BPHZ theorem for SPDEs, Euler institute, St Petersburg
June, 2017	A BPHZ theorem for SPDEs, PIMS, Vancouver
April, 2018	Chern Lectures, Berkeley
April, 2018	Simons Lectures, Stony Brook
June, 2018	Summer school, ITS Austria, Vienna
July, 2018	Summer school, Beijing
July, 2018	Summer school, Varese
August, 2018	Summer school, Santander
December, 2019	The Brownian Castle, Lisbon

Fellowships

03/2019	5-year Royal Society research professorship. (£1.2M)
05/2014	5-year ERC consolidator award. (€ 1.5M)
09/2013	6-year Leverhulme Leadership Award. (£950k)
10/2006	5-year EPSRC Advanced Research Fellowship EP/E002269/1. (£413k)
10/2004	2-year Advanced research fellowship of the Swiss National Science Foundation (CHF96k could not be taken up because it clashed with the position in Warwick).
10/2003	1-year Advanced research fellowship of the Swiss National Science Foundation. (CHF48k)
10/2002	1-year Research fellowship of the Swiss National Science Foundation. (CHF39k)

Grants

01/2011	EPSRC Grant EP/I014829/1 (funding for a 1 year symposium; joint with N. O'Connell (PI), J. Warren, and B. Hambly) (£200k)
10/2007	EPSRC Grant EP/F029950/1 (funding for a 1 week meeting; joint with W. Kendall (PI) and J. Warren) (£20k)
10/2006	EPSRC Grant EP/E002269/1 (funding for a 3 year postoc position; joint with A. Stuart) (£267k)

Publications and Preprints

Refereed articles

[1] J.-P. Eckmann and M. Hairer, *Non-Equilibrium Statistical Mechanics of Strongly Anharmonic Chains of Oscillators*, Commun. Math. Phys. **212** (2000), no 1, pp. 105–164

[2] J.-P. Eckmann and M. Hairer, *Invariant Measures for Stochastic PDE's in Unbounded Domains*, Nonlinearity **14** (2001), pp. 133–151

[3] J.-P. Eckmann and M. Hairer, *Uniqueness of the Invariant Measure for a Stochastic PDE Driven by Degenerate Noise*, Commun. Math. Phys. **219** (2001), no 3, pp. 523–565

[4] M. Hairer, *Exponential Mixing for a Stochastic PDE Driven by Degenerate Noise*, Nonlinearity **15** (2002), pp. 271–279

[5] M. Hairer, *Exponential Mixing Properties of Stochastic PDEs Through Asymptotic Coupling*, Probab. Theory Relat. Fields **124** (2002), no 3, pp. 345–380

[6] J.-P. Eckmann and M. Hairer, *Spectral Properties of Hypoelliptic Operators*, Commun. Math. Phys. **235** (2003), no 2, pp. 233–253

[7] D. Blömker and M. Hairer, *Stationary Solutions for a Model of Amorphous Thin-Film Growth*, Stoch. Anal. Appl. **22** (2004), no 4, pp. 903–922

[8] D. Blömker and M. Hairer, *Multiscale expansion of invariant measures for SPDEs*, Commun. Math. Phys. **251** (2004), pp. 515–555

[9] M. Hairer and G. Pavliotis, *Periodic Homogenization for Hypoelliptic Diffusions*, J. Stat. Phys. **117** (2004), no. 1/2, pp. 261–279

[10] M. Hairer and J. Mattingly, *Ergodicity of the 2D Navier-Stokes Equations with Degenerate Stochastic Forcing*, Ann. of Math. **164** (2006), no 3, pp. 993–1032

[11] D. Blömker, M. Hairer, and G. Pavliotis, *Modulation Equations: Stochastic Bifurcation in Large Domains*, Commun. Math. Phys. (258) (2005), no 2, pp. 479–512

[12] M. Hairer, J. Mattingly, and E. Pardoux, *Malliavin calculus for highly degenerate 2D stochastic Navier-Stokes equations*, C. R. Acad. Sci. Paris, Ser. I **339** (2004), no. 11, pp. 793–796

[13] M. Hairer and J. Mattingly, *Ergodic properties of highly degenerate 2D stochastic Navier-Stokes equations*, C. R. Acad. Sci. Paris, Ser. I **339** (2004), no. 12, pp. 879–882

[14] M. Hairer, *Ergodicity of stochastic differential equations driven by fractional Brownian motion*, Ann. Probab. **33** (2005), no 3, pp. 703–758

[15] M. Hairer, A. M. Stuart, J. Voß, and P. Wiberg, *Analysis of SPDEs Arising in Path Sampling Part I: The Gaussian Case*, Comm. Math. Sci. **3** (2005), no 4, pp. 587–603

[16] A. Apte, M. Hairer, A. M. Stuart, and J. Voß, *A Bayesian approach to data assimilation*, Physica D **230** (2007), pp. 50–64

[17] M. Hairer and A. Ohashi, *Ergodic theory for SDEs with extrinsic memory*, Ann. Probab. **35** (2007), no 5, pp. 1950–1977

[18] F. Baudoin and M. Hairer, *Hörmander's theorem for fractional Brownian motion*, Probab. Theory Rel. Fields **139** (2007), no 3/4, pp. 373–395

[19] D. Blömker, M. Hairer, and G. Pavliotis, *Multiscale Analysis for SPDEs with Quadratic Nonlinearities*, Nonlinearity **20** (2007), no 7, pp. 1721–1744

[20] M. Hairer, A. M. Stuart, and J. Voß, *Analysis of SPDEs Arising in Path Sampling Part II: The Nonlinear Case*, Ann. Appl. Probab. **17** (2007), no 5/6, pp. 1657–1706

[21] F. Flandoli, M. Gubinelli, M. Hairer, and M. Romito, *Remarks on the K41 scaling law in turbulent fluids*, Commun. Math. Phys. **278** (2008), no 1, pp. 1–29

[22] M. Hairer and G. Pavliotis, *From ballistic to diffusive behavior in periodic potentials*, J. Stat. Phys. **131** (2008), no 1, pp. 175–202

[23] F. Baudoin, M. Hairer, and J. Teichmann *Ornstein-Uhlenbeck processes on Lie groups*, J. Func. Anal. **255** (2008), no 4, pp. 877–890

[24] M. Hairer and E. Pardoux *Homogenization of periodic linear degenerate PDEs*, J. Func. Anal. **255** (2008), no 9, pp. 2462–2487

[25] M. Hairer and J. Mattingly, *Spectral gaps in Wasserstein distances and the 2D stochastic Navier-Stokes equations*, The Annals of Probability **36** (2008), no 6, pp. 2050–2091

[26] M. Hairer, *Ergodic properties of a class of non-Markovian processes*, 'Trends in Stochastic Analysis', LMS Lecture Notes Series 353

[27] M. Hairer, A. Stuart and J. Voß, *Sampling conditioned diffusions*, 'Trends in Stochastic Analysis', LMS Lecture Notes Series 353

[28] M. Hairer and J. Mattingly, *Slow energy dissipation in anharmonic oscillator chains*, Commun. Pure Appl. Math. **62** (2009), no 8, pp. 999–1032

[29] M. Hairer, *How hot can a heat bath get?*, Commun. Math. Phys. **292** (2009), no 1, pp. 131–177

[30] R. F. Bass, K. Burdzy, Z.-Q. Zheng, and M. Hairer, *Stationary distributions for diffusions with inert drift*, Probab. Theo. Rel. Fields **146** (2010), no 1, pp. 1–47

[31] M. Hairer, J. Mattingly, and M. Scheutzow, *Asymptotic coupling and a weak form of Harris' theorem with applications to stochastic delay equations*, Probab. Theo. Rel. Fields **149** (2010), no 1–2, pp. 223–259

[32] M. Hairer and A. Majda, *A simple framework to justify linear response theory*, Nonlinearity **23** (2010), no 4, pp. 909–922

[33] M. Hairer and C. Manson, *Periodic homogenization with an interface: the one-dimensional case*, Stoch. Proc. Appl. **120** (2010), no 8, pp. 1589–1605

[34] M. Hairer, A. Stuart, and J. Voß, *Sampling Conditioned Hypoelliptic Diffusions*, Ann. Appl. Probab. **21** (2010), no 2, pp. 669-698

[35] M. Hairer and N. S. Pillai, *Ergodicity of hypoelliptic SDEs driven by fractional Brownian motion*, Annals IHP, Ser B. (2010)

[36] M. Hairer and C. Manson, *Periodic homogenization with an interface: the multi-dimensional case*, Ann. Probab. **39** (2011), no 2, pp. 648–682

[37] M. Hairer and J. Mattingly, *Yet another look at Harris' ergodic theorem for Markov chains*, Seminar on Stochastic Analysis, Random Fields and Applications VI, Progr. Probab., **63** (2011), pp. 109-–117

[38] M. Hairer and J. Mattingly, *A Theory of Hypoellipticity and Unique Ergodicity for Semilinear Stochastic PDEs*, Electron. J. Probab, **16** (2011), pp. 658–738

[39] M. Hairer and J. Voß, *Approximations to the Stochastic Burgers Equation*, Journ. Nonlin. Sci., **21** (2011), no 6, pp. 897–920

[40] M. Allman, V. Betz, and M. Hairer, *A chain of interacting particles under strain*, Stoch. Proc. Appl., **121** (2011), no 9, pp. 2014–2042

[41] M. Hairer, *Rough stochastic PDEs*, Commun. Pure Appl. Math., **64** (2011), no 11, pp. 1547–1585

[42] M. Hairer, *On Malliavin's proof of Hörmander's theorem*, Bull. Sci. Math., **135** (2011), no 6-7, pp. 650-666

[43] M. Hairer, *Singular perturbations to semilinear stochastic heat equations*, Probab. Theo. Rel. Fields **152** (2012), no 1, pp. 265–297

[44] M. Hairer, M.D. Ryser and H. Weber, *Triviality of the 2D Allen-Cahn equation*, Electron. J. Probab. **17** (2012), no. 39, pp. 1–14

[45] M. Hairer and D. Kelly, *Stochastic PDEs with multiscale structure*, Electron. J. Probab. **17** (2012), no. 52, pp. 1–38

[46] M. Hairer and J. Maas, *A spatial version of the Itô-Stratonovich correction*, Ann. Probab., **40** (2012), no 4, pp. 1675–1714

[47] M. Hairer and H. Weber, *Rough Burgers-like equations with multiplicative noise*, Probab. Theo. Rel. Fields, **155** (2013), no. 1–2, pp. 71–126

[48] N. Bou-Rabee and M. Hairer, *Non-asymptotic mixing of the MALA algorithm*, IMA J Numer Anal **33** (2013), no. 1, pp. 80–110

[49] M. Hairer, *Solving the KPZ equation*, Ann. of Math., **178** (2013), pp. 559–664

[50] M. Hairer and N. S. Pillai, *Regularity of Laws and Ergodicity of Hypoelliptic SDEs Driven by Rough Paths*, Ann. Probab., **41** (2013), no 4, pp. 2544–2598

[51] M. Hairer, E. Pardoux, and A. Piatnitski, *Random homogenisation of a highly oscillatory singular potential*, SPDEs: Anal. and Comp., **1** (2013), no 4, pp. 571–605

[52] M. Hairer, J. Maas and H. Weber, *Approximating rough stochastic PDEs*, Commun. Pure Appl. Math., **67** (2014), no 5, pp. 776–870

[53] M. Hairer, *A Theory of Regularity Structures*, Invent. Math., **198** (2014), no 2, pp. 269–504

[54] M. Hairer, D. Kelly, *Geometric versus non-geometric rough paths*, Ann. IHP (B), **51** (2015), no 1, pp. 207–251

[55] T. Cass, M. Hairer, C. Litterer and S. Tindel, *Smoothness of the density for solutions to Gaussian Rough Differential Equations*, Ann. Probab., **43** (2015), no 1, pp. 188–239

[56] M. Hairer, M. Hutzenthaler, and A. Jentzen, *Loss of regularity for Kolmogorov equations*, Ann. Probab., **43** (2015), no 2, pp. 468–527

[57] M. Hairer, A. Stuart and S. Vollmer, *Spectral Gaps for a Metropolis-Hastings Algorithm in Infinite Dimensions*, Ann. Appl. Probab., **24** (2014), no 6, pp. 2455–2490

[58] M. Hairer and J. Weare, *Improved diffusion Monte Carlo*, Commun. Pure Appl. Math., **67** (2014), no 12, pp. 1995–2021

[59] M. Hairer and J. Weare, *The Brownian fan*, Commun. Pure Appl. Math., **68** (2015), no 1, pp. 1–60

[60] B. Cloez and M. Hairer, *Exponential ergodicity for Markov processes with random switching*, Bernoulli, **21** (2015), no 1, pp. 505–536

[61] M. Hairer, *Introduction to Regularity Structures*, Braz. J. Prob. Stat., **29** (2015), no 2, pp. 175–210

[62] M. Hairer and C. Labbé, *A simple construction of the continuum parabolic Anderson model on $\mathbf{R}^2$*, Electron. Commun. Probab., **20** (2015), no. 43, 11 pp

[63] M. Hairer and H. Weber, *Large deviations for white-noise driven, nonlinear stochastic PDEs in two and three dimensions*, Ann. Fac. Sci. Toulouse (6), **24** (2015), no 1, pp. 55–92.

[64] M. Hairer and E. Pardoux, *A Wong-Zakai theorem for stochastic PDEs*, Jour. Math. Soc. Japan, **67** (2015), no 4, pp. 1551–1604

[65] M. Hairer and H. Shen, *The dynamical sine-Gordon model*, Commun. Math. Phys., **341** (2016), no 3, pp. 933–989

[66] M. Hairer, L. Koralov, and Z. Pajor-Gyulai, *From averaging to homogenization in cellular flows - an exact description of the transition*, Ann. IHP Probab. Stat., **52** (2016), no 4, pp. 1592–1613

[67] M. Hairer and K. Matetski, *Optimal rate of convergence for stochastic Burgers-type equations*, SPDEs: Anal. Appl., **4** (2016), no 4, pp. 402–437

[68] M. Hairer and C. Labbé, *Multiplicative stochastic heat equations on the whole space*, J. Eur. Math. Soc. (JEMS) **20** (2018), no. 4, 1005–1054

[69] M. Hairer and H. Shen, *A central limit theorem for the KPZ equation*, Ann. Probab. **45** (2017), no. 6B, 4167–4221

[70] M. Hairer and K. Matetski, *Discretisations of rough stochastic PDEs*, Ann. Probab. **46** (2018), no. 3, 1651–1709

[71] M. Hairer and W. Xu, *Large scale behaviour of 3D phase coexistence models*, Comm. Pure Appl. Math. **71** (2018), no. 4, 688–746

[72] C.-E. Bréhier, M. Hairer and A. Stuart, *Weak error estimates for trajectories of SPDEs under Spectral Galerkin discretization*, J. Comput. Math. **36** (2018), no. 2, 159–182

[73] M. Hairer, G. Iyer, L. Koralov, A. Novikov and Z. Pajor-Gyulai *A fractional kinetic process describing the intermediate time behaviour of cellular flows*, Ann. Probab. **46** (2018), no. 2, 897–955

[74] M. Hairer and C. Labbé, *The reconstruction theorem in Besov spaces*, J. Funct. Anal. **273** (2017), no. 8, 2578–2618

[75] M. Hairer and J. Mattingly, *The strong Feller property for singular stochastic PDEs*, Ann. Inst. Henri Poincaré Probab. Stat. **54** (2018), no. 3, 1314–1340

[76] M. Hairer and M. Iberti, *Tightness of the Ising-Kac model on the two-dimensional torus*, J. Stat. Phys. **171** (2018), no. 4, 632–655

[77] N. Cuneo, J.-P. Eckmann, M. Hairer, L. Rey-Bellet, *Non-equilibrium steady states for networks of oscillators*, Electron. J. Probab. **23** (2018), Paper No. 55, 28pp

[78] M. Hairer, *Renormalisation of parabolic stochastic PDEs*, Jpn. J. Math. **13** (2018), no. 2, 187–233.

[79] M. Hairer and J. Quastel, *A class of growth models rescaling to KPZ*, Forum Math. Pi **6** (2018), e3, 112pp

[80] Y. Bruned, M. Hairer and L. Zambotti, *Algebraic renormalisation of regularity structures*, Invent. Math. **215** (2019), no. 3, 1039–1156

[81] M. Gerencsér, M. Hairer, *Singular SPDEs in domains with boundaries*, Probab. Theory Related Fields **173** (2019), no. 3-4, 697–758

[82] M. Gerencsér, M. Hairer, *A solution theory for quasilinear singular SPDEs*, Comm. Pure Appl. Math. **72** (2019), no. 9, 1983–2005.

[83] D. Erhard, M. Hairer, *Discretisation of regularity structures*, Ann. Inst. Henri Poincaré Probab. Stat. **55** (2019), no. 4, 2209–2248

[84] M. Hairer, W. Xu, *Large scale limit of interface fluctuation models*, Ann. Probab. **47** (2019), no. 6, 3478–3550

[85] A. Gerasimovičs, M. Hairer, *Hörmander's theorem for semilinear SPDEs*, Electron. J. Probab. **24** (2019), Paper No. 132, 56 pp

Proceedings articles

[86] E. Hairer and M. Hairer, GniCodes - Matlab programs for geometric numerical integration. *Frontiers in Numerical Analysis (Durham 2002)*, Springer, Berlin, 2003.

[87] M. Hairer, *Coupling stochastic PDEs*, Proceedings of the ICMP, 2003

[88] D. Blömker and M. Hairer, *Amplitude Equations for SPDEs: Approximate Centre Manifolds and Invariant Measures*, Proceedings of the IMA (2003)

[89] M. Hairer and C. Manson, *Periodic homogenization with an interface*, Proceedings of ISAAC 2009

[90] M. Hairer, *Hypoellipticity in Infinite Dimensions*, Proceedings of ISAAC 2009

[91] M. Hairer, *Singular stochastic PDEs*, Proceedings of the ICM, 2014

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