15th Oxford-Berlin Young Researchers Meeting on Applied Stochastic Analysis

– Schedule –

Weierstrass Institute for Applied Analysis and Stochastics

Thursday, 12th May

Location: TU Berlin
https://goo.gl/maps/yqEbpva4ojEGGyoV6
Room: MA 415

09:00–09:20	**Welcome**	
Chair:	Oleg Butkovsky	
09:20–09:40	Paul Hager (HU Berlin)	*Signature Cumulants and Magnus Expansion - Examples*
09:40–10:00	Sascha Gaudlitz (HU Berlin)	*From diffusion to reaction – Statistical Inference for semi-linear SPDEs*
10:00–10:20	Uzu Lim (University of Oxford)	*Tangent space estimation from finite sample*
10:20–11:00	**Coffee Break**	
Chair:	Tom Klose	
11:00–11:20	Leonard Schmitz (University of Greifswald)	*Attention on signature-type features: beating quadratic costs*
11:20–11:40	Benjamin Walker (University of Oxford)	*Improved Sliced Score Matching*
11:40–12:00	Carlo Bellingeri (TU Berlin)	*A Young-type Euler-Maclaurin formula*
12:00–13:20	**Lunch Break**	
Chair:	Benjamin Walker	
13:20–13:40	Johanna Weinberger (Martin-Luther University of Halle Wittenberg)	*The p-variation of stochastic evolution equations and applications in numerical analysis*
13:40–14:00	Yannic Vargas (WIAS Berlin)	*Cumulant-to-moment relations from Hopf algebras*
14:00–14:20	Ruhong Jin (University of Oxford)	*The Compact Support Property of Rough Super Brownian Motion on $\mathbb{R}^2$*
14:20–14:40	Toyomu Matsuda (FU Berlin)	*An extension of the stochastic sewing lemma*
14:40–15:20	**Coffee Break**	
Chair:	Carlo Bellingeri	
15:20–15:40	William Salkeld (WIAS Berlin)	*Random controlled rough paths*
15:40–16:00	Isao Sauzedde (University of Oxford)	*Magnetic impurities and a random rough path extension for the Brownian motion*
16:00–16:20	Oleg Butkovsky (WIAS Berlin)	*Strong rate of convergence of the Euler scheme for SDEs with irregular drift driven by Levy noise*

Remark: There is a talk in MA 041 at 16:30 pm for all those interested:
Speaker: Huilin Zhang (Shandong University + HU Berlin)
Title: Wellposedness of path-dependent seminlinear parabolic master equations

Friday, 13th May

Location: **Hausvogteiplatz 5-7**
`https://goo.gl/maps/Q5dpxqTdTtLctDnK8`
Room: 007

Chair:	TBA	
09:00–09:20	Łukasz Madry (Universite Paris-Dauphine)	*Reflected singular SDEs*
09:20–09:40	Yizheng Yuan (TU Berlin)	*Precise regularity of SLE*
09:40–10:00	Patric Bonnier (University of Oxford)	*Proper Scoring Rules, Divergences, and Entropies for Paths*
10:00–10:20	Wei Xiong (University of Oxford)	*Dynamics of Market Making Algorithms in Dealer Markets*
10:20–11:00	**Coffee Break**	
Chair:	TBA	
11:00–11:20	James Foster (University of Oxford)	*High order splitting methods for stochastic differential equations*
11:20–11:40	Mazyar Ghani (FernUniversitaet Hagen)	*The geometry of controlled rough paths*
11:40–12:00	Markus Tempelmayr (Max-Planck-Institute for Mathematics in the Sciences)	*A diagram-free approach to the stochastic estimates in regularity structures*
12:00–13:20	**Lunch Break**	
Chair:	Helena Kremp	
13:20–13:40	Willem van Zuijlen (WIAS Berlin)	*Anderson Hamiltonians with singular potentials*
13:40–14:00	Huanyu Yang (FU Berlin)	*Brownian fluctuation of periodic KPZ equation*
14:00–14:20	Julian Meier (University of Oxford)	*Interacting Particle Systems with Sticky Boundary*
14:20–14:40	Philipp Forstner (TU Berlin)	*Increased Regularity of Minimizers in the Study of Laplace Asymptotics*
14:40–15:20	**Coffee Break**	
Chair:	TBA	
15:20–15:40	Purba Das (University of Oxford)	*Quadratic variation along refining partitions: Constructions and Examples*
15:40–16:00	Nikolas Tapia (WIAS Berlin)	*Stability of Deep Neural Networks via discrete rough paths*
16:00–16:20	Rosa Preiß (University of Potsdam)	*Orthogonal and special linear invariants of paths via the iterated-integral signature: Overview and new developments*
16:20–16:40	Satoshi Hayakawa (Uiversity of Oxford)	*Random convex hull, cubature, hypercontractivity*

Saturday, 14th May

Location: **Hausvogteiplatz 5-7**
`https://goo.gl/maps/Q5dpxqTdTtLctDnK8`
Room: 007

Chair: TBA

09:00–09:20	Zimo Hao (Bielefeld University)	*Strong convergence of propagation of chaos for McKean-Vlasov SDEs with singular interactions*
09:20–09:40	Emanuela Gussetti (Bielefeld University)	*Existence of an invariant measure for the stochastic Landau-Lifschitz-Gilbert equation in 1D*
09:40–10:00	Helena Kremp (FU Berlin)	*Periodic homogenization for singular SDEs*
10:00–10:20	Florian Bechtold (Bielefeld University)	*Weak solutions for singular multiplicative SDEs via regularization by noise*
10:20–11:00	**Coffee Break**	
Chair:	TBA	
11:00–11:20	Francesca Cottini (University of Milano-Bicocca)	*Gaussian Limits for Subcritical Chaos*
11:20–11:40	Emanuele Verri (University of Greifswald)	*Counting subgraphs using Hopf algebras*
11:40–12:00	Simon Breneis (WIAS Berlin)	*An error representation formula for the Log-ODE method*