

# 19th Oxford-Berlin Young Researchers Meeting on Applied Stochastic Analysis

– Schedule –

## Monday, 24th June

**Location:** WIAS Berlin, Mohrenstraße 39, 10117 Berlin  
<https://osm.org/go/0MbEfZK0t?node=5374911183>  
Room: Erhard-Schmidt-Hörsaal (Ground Floor)

09:00–09:30	<b>Welcome</b> Chair: Luca Pelizzari	
09:30–10:00	Paul Hager (TU Berlin)	<i>Advancing Optimal Control with Signatures</i>
10:00–10:30	Marco Rauscher (TU Munich)	<i>Shortest-path recovery from signature with an optimal control approach</i>
10:30–11:00	<b>Coffee Break</b> Chair: Paul Hager	
11:00–11:30	Benjamin Walker (University of Oxford)	<i>Log Neural Controlled Differential Equations: The Lie Brackets Make a Difference</i>
11:30–12:00	Francesco Piatti (Imperial College London)	<i>Computing the untruncated signature kernel with polynomial boundary conditions</i>
12:00–13:30	<b>Lunch Break</b> Chair: Thomas Wagenhofer	
13:30–14:00	Jost Pieper (University of Durham)	<i>Rough SDEs with jumps</i>
14:00–14:30	Fabio Bugini (TU Berlin)	<i>Continuity and differentiability of rough stochastic differential equations with respect to a parameter</i>
14:30–15:00	Franziska Bielert (TU Berlin)	<i>Conditional Stochastic Optimal Control</i>
15:00–15:30	<b>Coffee Break</b> Chair: Franziska Bielert	
15:30–16:00	Julio Ernesto Nava Trejo (HU Berlin)	<i>Lookdown construction for a Moran seed-bank model</i>
16:00–16:30	Marco Rehmeier (Bielefeld University)	<i>Probabilistic representation of nonlinear Fokker-Planck equations and nonlinear PDEs by nonlinear Markov processes</i>

## Tuesday, 25th June

**Location:** WIAS Berlin, Mohrenstraße 39, 10117 Berlin  
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- Chair: Benjamin Walker
- 09:30–10:00 Ioannis Gasteratos (Imperial College London) *Uniform Attraction and Metastability for Stochastic Damped Wave Equations*
- 10:00–10:30 Florian Bechtold (Bielefeld University) *On Young regimes for locally monotone SPDEs*
- 10:30–11:00 **Coffee Break**
- Chair: Rosa Preiss
- 11:00–11:30 Abdulwahab Mohamed (University of Edinburgh) *Rough additive functions and application to Yang Mills theory*
- 11:30–12:00 Shyam Popat (University of Oxford) *Well-posedness of the Dean-Kawasaki equation with correlated noise on bounded domains*
- 12:00–13:30 **Lunch Break**
- Chair: Fabio Bugini
- 13:30–14:00 Oleg Butkovsky (WIAS Berlin) *Optimal weak uniqueness for SDEs driven by fractional Brownian motion and for stochastic heat equation with distributional drift.*
- 14:00–14:30 Gideon Chiusole (TU Munich) *Towards Abstract Wiener Model Spaces*
- 14:30–15:00 Leander Schnee (FU Berlin) *Equilibrium Fluctuations for Weakly Asymmetric Interacting Particle Systems with Boundaries*
- 15:00–15:30 **Coffee Break**
- Chair: Oleg Butkovsky
- 15:30–16:00 Matthew Buckland (University of Oxford) *Branching Interval Partition Diffusions*
- 16:00–16:30 Florin Suciú (Université Paris Dauphine-PSL) *A gradient flow on control space with rough initial condition*
- 18:30 **Conference dinner**

## Wednesday, 26th June

**Location:** WIAS Berlin, Mohrenstraße 39, 10117 Berlin  
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Room: Erhard-Schmidt-Hörsaal (Ground Floor)

Chair:

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| 09:30–10:00 | Sebastian Ertel<br>(TU Berlin)              | <i>Novel Random Vortex Methods for approximating incompressible Navier-Stokes equations</i> |
| 10:00–10:30 | Nikolas Tapia<br>(WIAS Berlin)              | <i>A multiplicative surface signature through its Magnus expansion</i>                      |
| 10:30–11:00 | <b>Coffee Break</b><br>Chair: Nikolas Tapia |   |
| 11:00–11:30 | Leonard Schmitz<br>(MPI MIS Leipzig)        | <i>Free generators and Hoffman's isomorphism for the two-parameter shuffle algebra</i>      |
| 11:30–12:00 | Rosa Preiss<br>(MPI MIS Leipzig)            | <i>Rough Paths on Affine Algebraic Varieties</i>  |

