2022 Summer School in Mathematics of Random Systems

Monday 26th September

8:30	Registration & Coffee		
9:00	Welcome & Introduction to CDT & IRTG		
9:30	**Stochastic Quantisation**	**Prof. Massimiliano Gubinelli**	
10:30	Break		
10:50	**Optimal transport theory and Wasserstein distances**	**Prof. Jan Obloj**	
11:50	Coffee Break		
12:20	Conservative SPDE and fluctuations for interacting particle systems	Andrea Clini	University of Oxford
12:40	Increased Regularity of Minimizers in the Study of Laplace Asymptotics	Philipp Forstner	TU Berlin
1:00	Lunch		
2:30	From diffusion to reaction – Statistical Inference for semi-linear SPDEs	Sascha Gaudlitz	HU Berlin
2:50	Edwards--Wilkinson fluctuations of a nonlinear SHE with non-integrable correlations	Luca Gerolla	Imperial College London
3:10	Branching Interval Partition Diffusions	Matthew Buckland	University of Oxford
3:30	Tea Break		
4:00	Superbrownian Motion with Dormancy	Dave Jacobi	TU Berlin
4:20	Wright-Fisher diffusion with a continuum of seed banks	Likai Jiao	HU Berlin
4:40	Certain rough super Brownian motion and its properties	Ruhong Jin	University of Oxford
5:00	Break		
5:20	Reception at Mathematical Institute		

Centre for Doctoral Training
Mathematics of Random Systems

Stochastic Analysis in Interaction

2022 Summer School in Mathematics of Random Systems

Tuesday 27th September

9:00	**Stochastic Quantisation**	**Prof. Massimiliano Gubinelli**	
10:30	Coffee Break		
11:00	Extended Mean Field Control Problems with Singular Controls	Robert Denkert	HU Berlin
11:20	Analysis of the Ensemble Kalman--Bucy Filter for correlated observation noise	Sebastian Ertel	TU Berlin
11:40	Exploring the tradeoff between information and cost in Stochastic Control	Jonathan Tam	University of Oxford
12:00	Bayesian Adaptive Optimal Stochastic Control	Alexander Merkel	TU Berlin
12:20	Lunch		
2:00	**Optimal transport theory and Wasserstein distances**	**Prof. Jan Obloj**	
3:30	Tea Break		
4:00	Macroscopic loops in a random walk loop soup	Alexandra Quitmann	WIAS Berlin
4:20	Topologies on unparameterised path space	Will Turner	Imperial College London
4:40	Quenched functional CLT for random walks in degenerate doubly stochastic environment	Weile Weng	TU Berlin
5:00	End		

Wednesday 28th September

9:00	**Stochastic Quantisation**	**Prof. Massimiliano Gubinelli**
10:30	Coffee Break	
11:00	**Optimal transport theory and Wasserstein distances**	**Prof. Jan Obloj**
12:30	Lunch	
2:00	Walk	
7:00	Dinner at St Hugh’s College	

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Thursday 29th September

9:00	**Stochastic Quantisation**	**Prof. Massimiliano Gubinelli**	
10:00	Coffee Break		
10:50	**Optimal transport theory and Wasserstein distances**	**Prof. Jan Obloj**	
11:50	Break		
12:10	On the nature of the convergence to quasi-ergodicity	Hugo Chu	Imperial College London
12:30	Axioms for Quantum Gauge Fields	Min Chul Lee	University of Oxford
12:50	Lunch		
2:00	Stochastic Reconstruction in the Square Increment Setting	Hannes Kern	TU Berlin
2:20	Abstract Fock space methods for weak well-posedness of some critical and subcritical singular SPDEs	Lukas Gräfner	FU Berlin
2:40	Stochastic sewing and fractional stochastic calculus	Toyomu Matsuda	FU Berlin
3:00	On the (Non-)Stationary Density of Fractional-Driven Stochastic Differential Equations	Julian Sieber	Imperial College London
3:20	Tea Break		
4:00	Markovian approximations of rough volatility models	Simon Breneis	WIAS Berlin
4:20	Merton's optimal investment problem with jump signals	Laura Koerber	TU Berlin
4:40	On n-player timing games and subgame-perfection	Emanuel Rapsch	TU Berlin
5:00	Second-Order Approximation of Limit Order Books in the Single-Scale Regime	Konstantins Starovoitovs	HU Berlin
5:20	End		

Friday 30th September

9:00	**Stochastic Quantisation**	**Prof. Massimiliano Gubinelli**
10:30	Coffee Break	
10:50	**Optimal transport theory and Wasserstein distances**	**Prof. Jan Obloj**
12:20	Takeaway Lunch & End	