

Intertwining between Probability, Analysis and Statistical Physics Workshop

(12–15 Aug 2024)

Organizing Committee

Co-chairs

Michael Choi
National University of Singapore

Pierre Patie
Cornell University

Laurent Miclo
Toulouse School of Economics and CNRS



Venue

IMS Auditorium
Institute for Mathematical Sciences
3 Prince George's Park Singapore 118402

For more information:

<https://ims.nus.edu.sg/events/intertwining-between-probability-analysis-and-statistical-physics/>

Workshop

12–15 August 2024

Monday, 12 Aug 2024		
Time	Title	Speaker
0900–0930	Registration	
0930–1030	Several interacting particle systems on lattices have duality functions that are products of single-site duality functions (Part I)	Sabine Jansen <i>Mathematisches Institut der Universität München, Germany</i>
1030–1100	<i>Coffee Break</i>	
1100–1200	Several interacting particle systems on lattices have duality functions that are products of single-site duality functions (Part II)	Sabine Jansen <i>Mathematisches Institut der Universität München, Germany</i>
1200–1400	<i>Lunch Break</i>	
1400–1500	Couplings of Brownian Motions with Set-Valued Dual Processes on Riemannian Manifolds	Marc Arnaudon <i>Université of Bordeaux, France</i>
1500–1530	<i>Coffee Break</i>	
1530–1630	On the separation cut-off phenomenon for Brownian motions on high dimensional rotationally symmetric compact manifolds	Kolehe Coulibaly-Pasquier <i>Université de Lorraine, France</i>
1630–1730	Interacting particle systems, conditioned random walks and the Aztec diamond	Theo Assiotis <i>University of Edinburgh, UK</i>
Tuesday, 13 Aug 2024		
Time	Title	Speaker
0915–0930	Registration	
0930–1030	A numerical search for intertwining relations	Jan Swart <i>Czech Academy of Sciences, Czech Republic</i>
1030–1100	<i>Coffee Break</i>	
1100–1200	Discrete Whittaker processes	Neil O’Connell <i>University College Dublin, Ireland</i>
1200–1400	<i>Group Photo & Lunch Reception at IMS</i>	
1400–1500	Projections of the Aldous chain on binary trees: Intertwining and consistency	Matthias Winkel <i>Oxford University, UK</i>
1500–1530	<i>Coffee Break</i>	

Tuesday, 13 Aug 2024		
Time	Title	Speaker
1530–1630	Single impurity in a step initial profile of the Totally Asymmetric Simple Exclusion Process	Ali Zahra <i>Instituto Superior Técnico, Portugal</i>
1630–1730	An algebraic perspective for scaling limits of non-self-adjoint operators	Filip Stojanovic <i>Cornell University, USA</i>
Wednesday, 14 Aug 2024		
Time	Title	Speaker
0915–0930	Registration	
0930–1030	On the intertwining approach for proving Poincaré type functional inequalities	Aldéric Joulin <i>Institut de Mathématiques de Toulouse, France</i>
1030–1100	<i>Coffee Break</i>	
1100–1200	Mixing & scaling limits of the averaging process	Federico Sau <i>University of Trieste, Italy</i>
1200–1400	<i>Lunch Break</i>	
1400–1500	Intertwining of some Markov semigroups on Carnot groups of step 2	Rohan Sarkar <i>Cornell University, USA</i>
1500–1530	<i>Coffee Break</i>	
1530–1630		Andrew Chee <i>Cornell University, USA</i>
1630–1700	<i>Coffee Break</i>	
1700	<u>Conference Dinner</u> 1-way transfer provided to Vivocity Dinner at Crystal Jade Pavilion	
Thursday, 15 Aug 2024		
Time	Title	Speaker
0915–0930	Registration	
0930–1030	On finite interweaving relations	Laurent Miclo <i>Toulouse School of Economics and CNRS, France</i>
1030–1100	<i>Coffee Break</i>	
1100–1200	Intertwining of non-self-adjoint Markov semigroups	Mladen Savov <i>Sofia University and Bulgarian Academy of Sciences, Bulgaria</i>
1200–1400	<i>Lunch Break</i>	

Thursday, 15 Aug 2024		
Time	Title	Speaker
1400–1500		Guillaume Barraquand <i>CNRS, France</i>
1500–1530	<i>Coffee Break</i>	
1530–1630		Dario Spano <i>Warwick University, UK</i>
1630–1730		Michael Choi <i>National University of Singapore, Singapore</i>

This schedule is accurate as of 04 Jul 2024 and is subjected to changes.