## Intertwining between Probability, Analysis and Statistical Physics Mini Courses

(05 Aug 2024–08 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: <a href="https://ims.nus.edu.sg/events/intertwining-between-probability-analysis-and-statistical-physics/">https://ims.nus.edu.sg/events/intertwining-between-probability-analysis-and-statistical-physics/</a>

Mini courses 05–08 August 2024

## Mini courses 05-08 August 2024

Monday, 05 Aug 2024				
Time	Title	Speaker		
0900-0930	Registration			
0930-1030	<u>Distinguished Visitor Lecture Series</u> An Introduction to Intertwining via Strong Stationary Duality Lecture 1: First Examples and Basic Setup	Persi Diaconis Stanford University, USA		
1030-1100	Coffee Break			
1100-1200	Duality of Markov Processes: a Lie Algebraic Approach Lecture 1: Introduction and basic ideas	Cristian Giardina Università degli Studi di Modena e Reggio Emilia, Italy		
1200-1400	Lunch Break			
1400-1500	On Set-Valued Intertwining Duality for Diffusion Processes(Part I)	Laurent Miclo Toulouse School of Economics and CNRS, France		

Tuesday, 06 Aug 2024				
Time	Title	Speaker		
0915-0930	Registration			
0930-1030	<u>Distinguished Visitor Lecture Series</u> An Introduction to Intertwining via Strong Stationary Duality Lecture 2: Duality and Intertwining	Persi Diaconis Stanford University, USA		
1030-1100	Coffee Break			
1100-1200	Duality of Markov Processes: a Lie Algebraic Approach Lecture 2: The su(1,1) Heisenberg spin chain	Cristian Giardina Università degli Studi di Modena e Reggio Emilia, Italy		
1200-1400	Group Photo & Lunch Reception at IMS			
1400-1500	On Set-Valued Intertwining Duality for Diffusion Processes(Part II)	Laurent Miclo Toulouse School of Economics and CNRS, France		

Mini courses 05–08 August 2024

Wednesday, 07 Aug 2024				
Time	Title	Speaker		
0915-0930	Registration			
0930-1030	<u>Distinguished Visitor Lecture Series</u> An Introduction to Intertwining via Strong Stationary Duality Lecture 3: Applications of Duality	Persi Diaconis Stanford University, USA		
1030-1100	Coffee Break			
1100-1200	Duality of Markov Processes: a Lie Algebraic Approach Lecture 3: Absorbing duality and propagation of mixtures	Cristian Giardina Università degli Studi di Modena e Reggio Emilia, Italy		
1200-1400	Lunch Break			
1400-1500	On Set-Valued Intertwining Duality for Diffusion Processes(Part III)	Laurent Miclo Toulouse School of Economics and CNRS, France		
1500-1600	Coffee Break			
1600-2000	Group Excursion 1-way transfer provided Gardens By the Bay Dinner at Hortus			

Thursday, 08 Aug 2024				
Time	Title	Speaker		
0915-0930	Registration			
0930-1030	Distinguished Visitor Lecture Series  An Introduction to Intertwining via Strong Stationary Duality Lecture 4: Developments and Open Problems	Persi Diaconis Stanford University, USA		
1030-1100	Coffee Break			
1100-1200	Duality of Markov Processes: a Lie Algebraic Approach Lecture 4: The integrable su(1,1) Heisenberg spin chain	Cristian Giardina Università degli Studi di Modena e Reggio Emilia, Italy		
1200-1400	Lunch Break			
1400-1500	On Set-Valued Intertwining Duality for Diffusion Processes(Part IV)	Laurent Miclo Toulouse School of Economics and CNRS, France		

This schedule is accurate as of 02 Jul 2024 and is subjected to changes.