Analytical and Combinatorial Methods in Quantum Information Theory II

Monday 24 – Friday 28 July 2023

The programme is subject to change. All times are British Summer Time (BST).

MONDAY 24 JUL	MONDAY 24 JULY 2023		
Chair: Milán Mosonyi, Budapest University of Technology and Economics			
09.00 - 09.25	Registration and Refreshments		
09.25 – 09.30	Welcome and Housekeeping		
09.30 - 10.30	Marius Junge, University of Illinois Urbana-Champaign		
	Collective Noise from finite to infinite dimension		
10.30 - 11.00	Refreshments		
11.00 – 12.00	Carlos Palazuelos, Universidad Complutense de Madrid		
	On some recent results about quantum XOR games		
12.00 - 13.00	Early Career session		
	- Roy Araiza, University of Illinois Urbana-Champaign		
	- Alexandros Chatzinikolaou, National Kapodistrian University of Athens		
	- Marco Fanizza, Universitat Autònoma de Barcelona		
13.00 - 14.00	Lunch		
14.00 – 16.00	Research session		
16.00 – 16.30	Refreshments		
16.30 – 17.30	Jason Crann, Carleton University		
	Values of quantum non-local games		
17.30 – 18.30	Welcome Reception, hosted at ICMS		

TUESDAY 25 JULY 2023		
Chair: Michael Brannan, University of Waterloo		
09.30 - 10.30	Matthias Christandl, University of Copenhagen	
	Tensors: rank, entropy and entanglement	
10.30 - 11.00	Refreshments	
11.00 – 12.00	Miguel Navascués, Austrian Academy of Sciences	
	Self-testing of quantum state ensembles and extreme POVMs in the prepare-and-measure scenario	
12.00 - 13.00	Early Career session	
	- Priyanga Ganesan, University of California San Diego	
	- Gage Hoefer, University of Delaware	
	- Andreas Klingler, University of Innsbruck	
	- Yinan Li, Wuhan University	
13.00 – 14.00	Lunch	
14.00 – 15.30	Research session	
15.30 – 16.00	Refreshments	
16.00 - 17.00	Tim Netzer, Universität Innsbruck	
	Abstract Cone Systems: A Categorial Approach To Operator Systems	

WEDNESDAY 26 JULY 2023		
Chair: Debbie Leung, University of Waterloo		
09.30 - 10.30	Vern Paulsen, University of Waterloo	
	Synchronous Values of Games	
10.30 - 11.00	Refreshments	
11.00 – 12.00	William Slofstra, University of Waterloo	
	Positivity is undecidable in product algebras	
12.00 – 13.00	Problem session	
13.00 – 14.00	Lunch and free afternoon	

THURSDAY 27 JU	THURSDAY 27 JULY 2023		
Chair: Lyudmila Turowska, Chalmers University of Technology / University of Gothenburg			
09.00 - 10.00	Anna Vershynina, University of Houston		
	Measuring quantum coherence		
10.00 - 10.30	Refreshments		
10.30 - 11.30	Michael Wolf, Technical University of Munich		
	Quantum no-go theorems based on algebraic-transcendental separations		
11.30 - 13.00	Early Career session		
	- Chiara Meroni, ICERM		
	- Eric Roon, The University of Arizona		
	- Samuel Scalet, University of Cambridge		
	- Yuming Zhao, University of Waterloo		
	- Jeroen Zuiddam, University of Amsterdam		
13.00 - 14.00	Lunch		
14.00 – 15.30	Research session		
15.30 – 16.00	Refreshments		
16.00 - 17.00	Milán Mosonyi, Budapest University of Technology and Economics		
	Barycentric Rényi divergences		
19.00	Workshop Dinner, hosted at Blonde Restaurant		
	75 St. Leonard's Street, Edinburgh EH8 7QR		

FRIDAY 28 JULY 2023			
Chair: Vern Paulsen, University of Waterloo			
09.30 - 10.30	Michael Brannan, University of Waterloo		
	Quantum no-signalling bicorrelations and quantum automorphisms of graphs		
10.30 - 11.00	Refreshments		
11.00 – 12.00	Debbie Leung, University of Waterloo		
	Quantum data compression and rate-distortion theory		
12.00 - 13.00	Michele Dall'Arno, Toyohashi University of Technology		
	Quantum guesswork: a combinatorial instance of quantum hypothesis testing		
13.00 - 14.00	Lunch and End of Workshop		