

**The Statistical Physics of Continuum Particle
Systems with Strong Interactions
(29 Aug–09 Sep 2022)**



*[Registration](#) is required for this program.

Venue
IMS Auditorium



ORGANIZING COMMITTEE

Co-Chairs

David Dereudre
Université de Lille

Subhro Ghosh
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Members

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National University of Singapore

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Workshop on The Statistical Physics of Continuum Particle Systems

(29 Aug–9 Sep 2022)

Monday, 29 August 2022

Time	Title	Speaker
0945–1000	Registration	
1000–1100	Determinantal point processes and random entire functions (I)	Alexander Bufetov Aix-Marseille University, France
1100–1115	<i>Tea Break</i>	
1115–1215	The perfect freezing transition and its characterization in terms of Beurling-Landau densities	Yacin Ameur Lund University, Sweden
1215–1430	<i>Lunch Break</i>	
1430–1515	Coulomb and Riesz gases: a review of what's known and unknown (I)	Mathieu Lewin Université Paris Dauphine, France
1515–1520	<i>Short Break</i>	
1520–1605	Coulomb and Riesz gases: a review of what's known and unknown (I)	Mathieu Lewin Université Paris Dauphine, France
1605–1630	<i>Tea Break</i>	
1630–1730	Hole events for Gaussian complex zeros and quadrature domains	Alon Nishry Tel Aviv University, Israel

Tuesday, 30 August 2022

Time	Title	Speaker
0945–1000	Registration	
1000–1100	Random polynomials near the unit circle	Oren Yakir Tel Aviv University, Israel
1100–1115	<i>Tea Break</i>	
1115–1215	Zeros of stationary Gaussian processes: overcrowding estimates & a phase transition	Lakshmi Priya Tel Aviv University, Israel
1215–1430	<i>Lunch Break</i>	
1430–1515	Coulomb and Riesz gases: a review of what's known and unknown (II)	Mathieu Lewin Université Paris Dauphine, France
1515–1520	<i>Short Break</i>	

Tuesday, 30 August 2022		
Time	Title	Speaker
1520–1605	Coulomb and Riesz gases: a review of what's known and unknown (II)	Mathieu Lewin Université Paris Dauphine, France
1605–1630	<i>Tea Break</i>	
1630–1730	Spectral properties of random perturbations of non-self-adjoint operators	Anirban Basak International Centre for Theoretical Sciences, TIFR, India

Wednesday, 31 August 2022		
Time	Title	Speaker
0915–0930	Registration	
0930–1030	Various scaling limits of planar symplectic ensembles	Sung-Soo Byun Korea Institute for Advanced Study, Korea
1030–1045	<i>Tea Break</i>	
1045–1130	Random plane geometry - a gentle introduction (I)	Balint Virag University of Toronto, Canada
1130–1135	<i>Short Break</i>	
1135–1220	Random plane geometry - a gentle introduction (I)	Balint Virag University of Toronto, Canada
1220–1430	<i>Lunch Break</i>	
1430–1515	Coulomb and Riesz gases: a review of what's known and unknown (III)	Mathieu Lewin Université Paris Dauphine, France
1515–1520	<i>Short Break</i>	
1520–1605	Coulomb and Riesz gases: a review of what's known and unknown (III)	Mathieu Lewin Université Paris Dauphine, France
1605–1630	<i>Tea Break</i>	
1630–1730	Convex hulls of random walks	Dmitry Zaporozhets St. Petersburg Department of Steklov Institute, Russia

Thursday, 01 September 2022		
Time	Title	Speaker
0945–1000	Registration	
1000–1100	A new correlation inequality for Ising models with external fields	Rongfeng Sun National University of Singapore, Singapore
1100–1115	<i>Tea Break</i>	
1115–1200	Determinantal point processes and random entire functions (II)	Alexander Bufetov Aix-Marseille University, France

Thursday, 01 September 2022		
Time	Title	Speaker
1200–1205	<i>Short Break</i>	
1205–1250	Determinantal point processes and random entire functions (II)	Alexander Bufetov Aix-Marseille University, France
1250–1500	<i>Lunch at IMS</i>	
1500–1600	Random Weierstrass zeta-function	Mikhail Sodin Tel Aviv University, Israel
1600–1630	<i>Group Photo & Tea Break</i>	
1630–1730	Fluctuations of two-dimensional Coulomb gases (I)	Thomas Leblé CNRS- Université Paris Cité, France

Friday, 02 September 2022		
Time	Title	Speaker
0945–1000	Registration	
1000–1100	Fluctuations of two-dimensional Coulomb gases (II)	Thomas Leblé CNRS- Université Paris Cité, France
1100–1115	<i>Tea Break</i>	
1115–1215	Zeros of the i.i.d. Gaussian Laurent series on an annulus	Tomoyuki Shirai Kyushu University, Japan
1215–1400	<i>Lunch Break</i>	
1400–1500	Limit law for line ensembles of Brownian polymers with geometric area tilts	Amir Dembo Stanford University, USA
1500–1530	<i>Please proceed to travel to Dept of Mathematics</i> Level 4, Block S17 #04-06 10 Lower Kent Ridge Road Singapore 119076	
1530–1600	Tea Reception at Lounge Area	
1600–1700	<i>Colloquium Talk at the Dept of Mathematics</i> Bisectors in random plane geometry	Balint Virag University of Toronto, Canada

Monday, 05 September 2022		
Time	Title	Speaker
0915–0930	Registration	
0930–1030	The rigidity of translation invariant random point fields implies sub-diffusivity	Hirofumi Osada Chubu University, Japan
1030–1045	<i>Tea Break</i>	
1045–1130	Determinantal point processes and random entire functions (III)	Alexander Bufetov Aix-Marseille University, France
1130–1135	<i>Short Break</i>	

Monday, 05 September 2022		
Time	Title	Speaker
1135–1220	Determinantal point processes and random entire functions (III)	Alexander Bufetov Aix-Marseille University, France
1220–1430	<i>Lunch Break</i>	
1430–1515	Random plane geometry - a gentle introduction (II)	Balint Virag University of Toronto, Canada
1515–1520	<i>Short Break</i>	
1520–1605	Random plane geometry - a gentle introduction (II)	Balint Virag University of Toronto, Canada
1605–1630	<i>Tea Break</i>	
1630–1730	Fluctuations of two-dimensional Coulomb gases (III)	Thomas Leblé CNRS- Université Paris Cité, France

Tuesday, 06 September 2022		
Time	Title	Speaker
0945–1000	Registration	
1000–1100	Noninteracting fermions in a rotating trap and random matrix theory	Gregory Schehr Sorbonne Université, France
1100–1115	<i>Tea Break</i>	
1115–1215	Determinantal point processes and random entire functions (IV)	Alexander Bufetov Aix-Marseille University, France
1215–1430	<i>Lunch Break</i>	
1430–1530	Limit theorems for continuum interacting particle systems	Yogeshwaran D Indian Statistical Institute, Bangalore, India
1530–1600	<i>Group Photo & Tea Break</i>	
1600–1700	Fluctuations of two-dimensional Coulomb gases (IV)	Thomas Leblé CNRS- Université Paris Cité, France

Wednesday, 07 September 2022		
Time	Title	Speaker
0945–1000	Registration	
1000–1100	Renormalized Energy Equidistribution and Local Charge Balance in Coulomb Systems	Simona Rota Nodari Université Côte d'Azur, France
1100–1115	<i>Tea Break</i>	
1115–1215	Recovering discrete Fourier spectra from random perturbations	Mircea Petrache Pontificia Universidad Católica de Chile, Chile
1215–1430	<i>Lunch Break</i>	

Wednesday, 07 September 2022

Time	Title	Speaker
1430–1515	Random plane geometry - a gentle introduction (III)	Balint Virag University of Toronto, Canada
1515–1520	<i>Short Break</i>	
1520–1605	Random plane geometry - a gentle introduction (III)	Balint Virag University of Toronto, Canada
1605–1630	<i>Tea Break</i>	
1630–1730	Fluctuations of two-dimensional Coulomb gases (V)	Thomas Leblé CNRS- Université Paris Cité, France

This schedule is accurate as of 05 Sep 2022.