

About Entropy in Large Classical Particle Systems
25-29 September 2023
L2

Schedule

Monday 25 September

- 14:00-15:00 Jean-René Chazottes, *Entropy in dynamical systems and ergodic theory*
15:00-16:00 Freddy Bouchet, *Relations between various entropy concepts and the quasi-potentials of classical kinetic theories*
16:00-16:30 Coffee
16:30-17:30 Clément Mouhot, *Entropy in PDE analysis*
17:30-18:30 Lorenzo Bertini, *Thermodynamic potentials for stationary non-equilibrium states*

Tuesday 26 September

- 9:00-10:00 Milton Jara, *Entropy methods in particle systems*
10:00-11:00 Juan Soler, *Mean-field limit of non-exchangeable multi-agent systems*
11:00-11:30 Coffee
11:30-12:30 Arnaud Guillin, *Entropy and mean field systems*
12:30-14:00 Lunch
14:00-15:00 Daniel Lacker, *Projected Langevin dynamics and entropic optimal transport*
15:00-16:00 François Golse, *The regularity problem for the Landau equation*
16:00-16:30 Coffee
16:30-17:30 Joel Lebowitz, *Boltzmann's entropy for macroscopic systems: the dilute gas*

Wednesday, 27 September – Clay Research Conference, L1

- 10:00-11:00 Valentin Blomer, *Density theorems and applications*
11:00-11:30 Coffee
11:30-12:30 John Pardon, *Derived moduli spaces of pseudo-holomorphic curves*
12:30-14:00 Lunch
14:00-15:00 Laure Saint Raymond, *What does entropy measure?*
15:00-15:30 Coffee
15:30-16:30 Chenyang Xu, *Kähler-Einstein metric, K-stability and moduli spaces*
16:30-17:30 Ivan Smith, *The work of John Pardon*
Isabelle Gallagher, *The work of Frank Merle, Pierre Raphaël, Igor Rodnianski, Jérémie Szeftel*
Presentation of the 2022 and 2023 Clay Research Awards
17:30-19:00 Reception in the Mathematical Institute

Thursday 28 September

- 9:00-10:00 Matt Rosenzweig, *Mean-field limits for Riesz systems*
10:00-11:00 François Huveneers, *Spreading of a wave packet in a classical disordered anharmonic chain*
11:00-11:30 Coffee
11:30-12:30 Stefano Olla, *Heat equation from a deterministic dynamics*
12:30-14:00 Lunch
14:00-15:00 Giada Basile, *Energy non-conserving paths for the Kac's walk*

- 15:00-16:00 Daniel Heydecker, *Dynamic Large Deviations: in search of matching bounds*
16:00-16:30 Coffee
16:30-17:30 Thomas Leblé, *Some aspects of the specific relative entropy in the study of log-gases*
17:30-18:30 Isabelle Gallagher, *Large Deviations for hard spheres in the low density limit*

Friday 29 September

- 9:00-10:00 Jérôme Buzzi, *Entropy, classifications, and structure theorems in dynamics*
10:00-10:30 Coffee
10:30-11:30 Herbert Spohn, *Integrable many-particle systems: generalised entropy and particle scattering*