
Long-Range Interacting Systems

ENS Lyon, LR6 C 023 - Salle de conférences
46 allée d'Italie, Lyon 7ème
Métro Stade de Gerland, Tél : 04 72 72 80 00

Meeting on Long-Range Interacting Systems organized thanks to PEPS CNRS Physique Théorique, GDR Phénix and ANR Loris.

Please note that registration is free but compulsory.

In addition to the speakers, participants include David BENHAIEM, Julien CHABE, Marianne CORVELLEC, Thierry DAUXOIS, Marie-Christine FIRPO, Zoe GUMM, Jean HEYVAERTS, Jorge KURCHAN, Jason LAURIE, Jules MORAND, Rachele NERATTINI, Aurelio PATELLI, Marco PETTINI, Stefano RUFFO, Pascal VIOT.

Monday 17 Octobre 2011

10h Welcome Coffee break

10h30-11h **Julien BARRE** (Nice) *Inhomogeneous stationary states of a Vlasov equation and Landau damping.*

11h-11h30 **Shamik GUPTA** (Lyon) *Quasi-stationarity in a model of classical spins with long-range interactions.*

11h30-12h **Fulvio BALDOVIN** (Padova) *Quasi-stationary dynamics and statistical mechanics of a long-range interacting system in contact with a heat bath.*

12h-12h30 **Alessandro CAMPA** (Roma) *The approach of long-range systems to quasi-stationary states : a possible description with the quasi-linear theory.*

12h30-14h00 Lunch

14h-14h30 **Pierre Henri CHAVANIS** (Toulouse) *Recent results on long-range interacting systems : the example of the HMF model.*

14h30-15h **Sergio CILIBERTO** (Lyon) *Measuring out-of-equilibrium fluctuations.*

15h-15h30 **Dominique ESCANDE** (Marseille) *Kinetic description of plasmas with particles.*

15h30-16h Pause

16h-16h30 **Antonio PICOZZI** (Dijon) *Kinetic wave equations and possible experiments in optics.*

16h30-17h00 **Cesare NARDINI** (Lyon) *Kinetic theory and numerics for a long range system subjected to external random forces.*

17h-17h30 **Wahb ETTOUMI** (Palaiseau) *Stochastic treatment of finite-N effects in mean-field systems and its application to the lifetimes of coherent structures.*

20h Dinner at *Brasserie Georges* (Reservation before Tuesday 11th, October, and as soon as possible, at <http://doodle.com/8seddv9rqbmh3wyw>).

Tuesday 17 October 2011

9h-9h30 **Robin KAISER** (Nice) *Light induced long-range interactions between laser cooled atoms.*

9h30-10h **Clément SIRE** (Toulouse) *Effective merging dynamics of two and three fluid vortices : application to two-dimensional decaying turbulence*

10h-10h30 **Freddy BOUCHET** (Lyon) *Statistical mechanics of the Shallow Water model and of the axisymmetric Euler equations.*

10h30-11h Pause

11h-11h30 **Antoine VENAILLE** (Lyon) *The vertical structure of oceanic turbulence : predictions from statistical mechanics.*

11h30-12h **Mani MATHUR** and J. SOMMERIA (Grenoble) *Modelling bistability of middle latitude atmospheric jet.*

12h-12h30 **Max POTTERS** (Lyon) *Sampling microcanonical measures of the 2D Euler and Shallow Water equations with the Creutz algorithm.*

12h30-14h00 Lunch

14h-14h30 **Angel ALASTUEY** (Lyon) *A continuous scaling limit for a gravitational model : thermalization and mean-field within a microcanonical description.*

14h30-15h **Michael JOYCE** (Paris) *Violent relaxation of self-gravitating systems in one and three dimensions.*

15h-15h30 **Lapo CASETTI** (Florence) *Statistical mechanics of King models of star clusters with a short-distance cutoff.*

15h30-16h Pause

16h-16h30 **Christophe PICHON** (Paris) *Seculary evolution of galactic halos induced by environment.*

16h30-17h00 **Jean-Louis ROUET** (Orléans) *Fractal analysis methods on a 1d gravitational expanding system.*

17h-17h30 **Eric BERTIN** (Lyon) *Non-local influence of flux balance on the non-equilibrium chemical potential.*

20h45 Real Madrid - Olympique Lyonnais (Live on TV).

Wednesday 19 October 2011

9h-9h30 **Hugo TOUCHETTE** (Londres) *Nonequivalence of ensembles for long-range interacting systems.*

9h30-10h **Xavier LEONCINI** (Marseille) *Self-organized regularity in systems with long-range interactions.*

10h-10h30 **Bruno MARCOS** (Nice) *Collisional relaxation in long range interacting systems and a classification of the range of pair interactions.*

10h30-11h Pause

11h-11h30 **Jordane PRETO** (Marseille) *Classical approach to long-range intermolecular resonant interactions.*

11h30-12h **Alessio TURCHI** (Florence) *Self organization and emergence of crystal ordering in a model of long-range rotators.*