

**``SYSTEMES A GRAND NOMBRE DE PARTICULES,
QUANTIQUES ET CLASSIQUES : DESCRIPTIONS STOCHASTIQUES ET
DÉTERMINISTES."'**

Université de Rennes 1 - 26, 27, 28 Mai 2004

PROGRAMME

Mercredi 26 mai 2004

- 09h30 – 10h30** Accueil - Welcome
- 10h30 – 11h30** J. A. Carillo (Barcelone)
Consequences of contractivity of Wasserstein-type metrics:
Granular media and nonlinear diffusion models
- 11h30 – 12h30** Th. Bodineau (Paris 6/7)
Current fluctuations in non-equilibrium diffusive systems
- 12h45 – 14h15** *Pause déjeuner - lunch*
- 14H30 – 15H30** P. E. Jabin (ENS Ulm)
To be announced.
- 15H30 – 16H30** C. Pallard (ENS Ulm)
Global smooth solutions to the relativistic Vlasov-Maxwell system.
- 16h30 – 17h00** *Pause*
- 17H00 – 18H00** N. Mauser (Vienne)
Time dependent Hartree Fock as a nonlinear one particle
approximation of the linear N particle Schroedinger equation

Jeudi 27 mai 2004

09h00 – 10h00 E. Caglioti (Rome)
To be announced.

10h00 – 11h00 C. Bernardin (ENS Cachan)
Fluctuations for Kawasaki dynamics.

11h00 – 11h30 *Pause*

11h30 – 12h30 V. Ricci (Rome)
Non-Markovian behavior of the Boltzmann-Grad limit of linear stochastic particle systems

12h45 – 14h15 *Pause déjeuner - lunch*

14H30 – 15H30 M. Pulvirenti (Rome)
A second order analysis of the weak-coupling limit of Bosons and Fermions

15h30 – 16h00 *Pause*

16H00 – 17H00 M. Hauray (Paris Dauphine)
Approximation of the Vlasov equation with singular potential by particle systems

Vendredi 28 mai 2004

09h30 – 10h30 G. Jona-Lasinio (Rome)
Dynamical approach to macroscopic fluctuations

10h30 – 11h00 *Pause*

11h00 – 12h00 C. Mouhot (ENS Lyon)
Rate of convergence to equilibrium for the spatially homogeneous Boltzmann equation.

12h15 – 13h45 *Pause déjeuner -lunch*

14H00 – 15H00 Y. Castin (LKB- ENS Ulm)
Méthodes stochastiques pour le problème a N corps gazeux

15H00 – 16H00 L. Erdoes (Munich)
Nonlinear Hartree equation as the mean field limit of weakly coupled fermions