STATISTICAL MECHANICS OF INTERFACES, LARGE DEVIATIONS AND HYDRODYNAMIC LIMITS

Wednesday 26 January 9h–18h 1994
Amphi Fresnel (Bat. P.Levy)
Ecole Polytechnique, Palaiseau

Statistical mechanics of interfaces is a broad subject of interest for both physicists and mathematicians. The aim of this conference is to bring together members of both communities working in that field and provide them with an overview on current researches in the study of large deviations and hydrodynamic limits in Ising models or stochastic particle systems. Speakers and titles are expected to include:

Gerard Ben Arous (Orsay): *Spin Glass Dynamics.*
Anton Bovier (Berlin): *Interfaces in Random Media.*
Roman Kotecký (Prague): *Intermediate Phases in Dilute Potts Models.*
Christian Maes (Leuven): *Interfaces and Large Deviations in Some Non Equilibrium Models.*
Salvador Miracle-Sole (Marseille): *Step Free Energy and Shape of Facets in the Ising Model.*
Enzo Olivieri (Rome): *Stochastic Ising Models and Crystal Growth.*
Stefano Olla (Torino): *Navier-Stokes Correction in Hydrodynamic Limits of Particle Systems.*
Milos Zahradník (Prague): *Stratified Gibbs States with Rigid Interfaces.*
Boguslaw Zegarlinski (London): *Strong Decay to Equilibrium in Disordered Spin Systems.*

We plan longer talks introducing the items in the title, and shorter talks to fit into one day. Participants are welcomed to submit a title for a short presentation of work about interfaces in relation to large deviations or hydrodynamic limits (title should be sent by email *before January 6*). It is expected that some discussions will continue during the following two days of "Rencontre de Physique Statistique". Participation to both events is encouraged.

Lunch is planned in the "Salle à manger des cadres" and should be reserved by all interested participants, including those from local institutions. Hotel reservation can be obtained from the secretariat of the "Rencontre de Physique Statistique". Cheaper accomodation is available at the Ecole Polytechnique, but requires early reservation (apply by email before January 6).

François Dunlop	Thierry Gobron	Ellen Saada
Centre de Physique Théorique	Physique de la Matière Condensée	Analyse et Modèles Stochastiques
Ecole Polytechnique	Ecole Polytechnique	Université de Rouen
(33 1) 69 33 47 16	(33 1) 69 33 46 66	(33) 35 14 67 20

The conference is free and open to all. To facilitate local organization, please register in advance by sending a filled copy of the form below:

Name: .....
Institution: .....
Address: .....
Country: .....
Phone: ..... Fax: .....
Email: .....
Lunch Reservation: YES [ ] NO [ ]

Return by email to **inter@orphee.polytechnique.fr**
or mail to: Agnès Dalle, Centre de physique théorique, Ecole Polytechnique,
91128 Palaiseau, France. Fax : (33 1) 69 33 30 08

Partially supported by a contract of the Copernicus programme of the European Communities.

STATISTICAL MECHANICS OF INTERFACES, LARGE DEVIATIONS AND HYDRODYNAMIC LIMITS

Wednesday 26 January 9h-17h30 (1994)
Amphi **MONGE**
Ecole Polytechnique, Palaiseau

PROGRAM and SCHEDULE

9h – 9h15 : RECEPTION

9h15 – 10h : **Roman Kotecký (Prague)**: *Intermediate Phases in Dilute Potts Models.*

10h – 10h15 : **Enzo Olivieri (Rome)**: *Stochastic Ising Models and Crystal Growth.*

10h15 – 10h30 : **Salvador Miracle-Solé (Marseille)**: *Step Free Energy and Shape of Facets in the Ising Model.*

10h30 – 10h45 : **Milos Zahradník (Prague)**: *Stratified Gibbs States with Rigid Interfaces.*

10h45 – 11h : COFFEE BREAK

11h – 11h45 : **Anton Bovier (Berlin)**: *Interfaces in Random Media.*

11h45 – 12h : **Boguslaw Zegarlinski (London)**: *Strong Decay to Equilibrium in Disordered Spin Systems.*

12h – 12h15 : **Adam Majewski (Gdańsk)**: *Quantum Characteristic Exponents.*

12h15 – 14h15 : LUNCH

14h15 – 15h : **Christian Maes (Leuven)**: *Interfaces and Large Deviations in Some Non Equilibrium Models.*

15h – 15h15 : **Stefano Olla (Torino-CMAP)**: *Navier-Stokes Correction in Hydrodynamic Limits of Particle Systems.*

15h15 – 15h30 : **Vadim Malyshev (INRIA)**: *Weakly Perturbed Voter Model Beyond the Hydrodynamic Limit.*

15h30 – 15h45 : **Cécile Appert (Paris)**: *Interface for a Diphasic Lattice Gas Model undergoing a Purely Dynamical Phase Transition.*

15h45 – 16h : COFFEE BREAK

16h – 16h45 : **Gerard Ben Arous (Orsay)**: *Spin Glass Dynamics.*

16h45 – 17h : **Anatoly Patrick (Leuven)**: *Large Deviations in the Spherical Model.*

17h – 17h15 : **Bertrand Duplantier (Saclay)**: *Renormalization of Interacting Membrane Models.*

17h15 – 17h30 : **Vincent Rivasseau (Palaiseau)**: *Cluster Expansion with Small and Large Field Conditions for Interface Models.*

A convenient train from Paris (RER B) leaves Luxembourg at 8h15 and reaches **Lozère** at 8h42. Ecole Polytechnique is 15' walk from that station. Further information is available by sending an e-mail to **inter@orphee.polytechnique.fr**. Fax: (33-1) 69 33 30 08.

François Dunlop
Centre de Physique Théorique
Ecole Polytechnique
(33 1) 69 33 47 16

Thierry Gobron
Physique de la Matière Condensée
Ecole Polytechnique
(33 1) 69 33 46 66

Ellen Saada
Analyse et Modèles Stochastiques
Université de Rouen
(33) 35 14 67 20

Partially supported by a contract of the Copernicus programme of the European Communities.