

Micro, Macro, Meta

A Workshop to Welcome Joel Lebowitz

Auditorium Jacy Monteiro, Instituto de Matemática e Estatística
Universidade de São Paulo, São Paulo, Brazil, October 17 and 18, 1997

LONG TALKS

Explicit Results for the Shock Structure and Other Properties of the Asymmetric Simple Exclusion Process in One Dimension

Joel Lebowitz (Rutgers University)

The Microscopic Origin of Time's Arrow: Dynamics and Probability

Joel Lebowitz (Rutgers University)

Macroscopic versus microscopic reversibility

Gianni Jona-Lasinio (Università di Roma I "La Sapienza")

Phase transitions in systems with long but finite range interactions

Errico Presutti (Università di Roma II "Tor Vergata")

Cellular automata with errors

Andre Toom (Universidade de São Paulo)

SHORT TALKS

If there are several authors, only the speaker's institution is given.

Equilibrium fluctuation of zero range processes in random environment

C. Landim (Instituto de Matemática Pura e Aplicada, Rio de Janeiro)

Stochastic Traffic: zero range process in random media

P. Ferrari, H. Guiol (Universidade de São Paulo) and C. Landim

Sequential Analysis for Image Restoration

E. J. Neves (Universidade de São Paulo)

Large deviations for the number of open clusters per site in long range bond percolation

F. Machado (Universidade de São Paulo)

Percolation of arbitrary words in critical site percolation on the triangular lattice

H. Kesten, V. Sidoravicius (Instituto de Matemática Pura e Aplicada, Rio de Janeiro) and Y. Zhang

Phase transition for a pinned Potts-type model

P. Ferrari (Universidade de São Paulo)

Contours of the ferromagnetic Ising models at low temperature viewed as a loss network

R. Fernández, P. Ferrari and N. L. Garcia (Universidade Estadual de Campinas)

Rigorous analyses of disordered models under stochastic dynamics:
Asymptotic form of the relaxation time of a mean field model and non weak convergence in time of a nearest neighbor model with random initial conditions

L. R. Fontes (Universidade de São Paulo)

Spin Exchange Monte Carlo Simulations—Is There a Problem?

V. Henriques (Universidade de São Paulo)

Lower Bounds and Optimal Algorithms for Generalization Errors of the Feedforward Neural Networks

N. Caticha (Universidade de São Paulo)

Characterizing Chaos

N. Fiedler-Ferrara (Universidade de São Paulo), N. N. Oiwa, A. S. Losano and C. J. R. Campos

The Relaxation Time in EFGM Model is Exponential

V. Belizsky (Universidade de São Paulo) and A. Toom

Probabilistic Cellular Automaton Describing a Biological Immune System

T. Tomé (Universidade de São Paulo)

Long time behavior of compaction in granular media

Alberto Petri and M. J. de Oliveira (Universidade de São Paulo)

Nucleation and growth for the Blume-Capel model

C. Peixoto (Universidade de São Paulo)

Effects of structural fluctuations in the thermodynamics of micellar solutions. A sum rule approach

C. Goldman (Universidade de São Paulo) and V. Henriques

Critical Behavior of Ising Models with Aperiodic Interactions

T. Haddad, S. Pinho and S. R. Salinas (Universidade de São Paulo)

Some Perspectives on the Problem of Griffiths' Singularities on the Cayley Tree

J. C. A. Barata (Universidade de São Paulo) and D. H. U. Marchetti

Coupled map lattices

H. Chaté (Centre d'Études de Saclay)

Pointwise bounds for effective potential kernels (and correlation functions) of the $d = 3$ Gross Neveu model in the infrared limit

M. O'Carroll, A. Procacci (Universidade Federal de Minas Gerais) and E. Pereira

On the $O(N)$ Vector Model in Three Dimensions: The Large- N Case

P. A. F. da Veiga (Universidade de São Paulo, São Carlos)

Three Open Problems for Quantum Systems under Time-Dependent Perturbations

W. F. Wreszinski (Universidade de São Paulo)

Absence of Quantum Effect in the Hierarchical Ising Model with Transverse Magnetic Field

C. Rodrigues and D. H. U. Marchetti (Universidade de São Paulo)

Perturbative expansion and phase diagram for the Hubbard model in the Falicov-Kimball limit

N. Datta, R. Fernández (Universidade de São Paulo) and J. Fröhlich

Drift, diffusion and stationary state for a one dimensional infinite mechanical system

V. Sidoravicius, L. Triolo and M. E. Vares (Instituto de Matemática Pura e Aplicada, Rio de Janeiro)

Fluctuations of repetition times for Gibbsian sources

P. Collet, A. Galves (Universidade de São Paulo) and B. Schmitt

Markov approximations of chains with complete connections

X. Bressaud (Universidade de São Paulo), A. Galves and R. Fernández

Markovian modeling of the stress contours of Brazilian and European Portuguese

C. Dorea, A. Galves, E. Kira and A. Pereira Alencar (Universidade de São Paulo)

Irreversible simulated annealing for modeling language acquisition

A. Galves and E. Kira (Universidade de São Paulo)

Self-organization of genetic coding in a hypercycle

C. Moreira (Universidade Federal de Minas Gerais)

The Relation Between Symmetric and Non Symmetric Operators. V-Region for Eigenvalues of Non Symmetric Random Matrices and Its Application in Some Problems of Spin Glasses and Neural Nets and Rigorous Proof of the Strong Circular and Elliptic Laws

V. L. Girko (Universidade Estadual de Campinas)

ROUND TABLE ON METASTABILITY AND HYDRODYNAMIC LIMITS

Participants: P. A. Ferrari (São Paulo), A. J. Galves (Chairman) (São Paulo), G. Jona-Lasinio (Roma "La Sapienza"), J. Lebowitz (Rutgers), C. Landim (IMPA, Rio de Janeiro), E. J. Neves (São Paulo), E. Presutti (Roma "Tor Vergata"), M. E. Vares (IMPA, Rio de Janeiro).