

Program of the Hyperbolic Dynamics and Applications to Nonequilibrium Statistical Mechanics Meeting

Sunday and Monday, October 13 and 14, 1996

Hill Center, Busch Campus, Rutgers University

Meeting coordinators:

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- D. Ruelle, ruelle@ihes.fr

Introduction to and Survey of Recent Developments in Nonequilibrium Statistical Mechanics and Dynamical Systems

G. Gallavotti

Differentiation of SRB States

D. Ruelle

SRB Measures and Markov Extensions

L.-S. Young

Examples of Symplectic and Volume Preserving Diffeomorphisms with Strictly Positive Metrical Entropy

M. Herman

Soft Techniques for Showing Chaotic Behavior for Multivalued Algebraic Maps

M. Rychlik

A General Concept of Multifractality: Multifractal Spectra for Dimensions, Entropies, and Lyapunov Exponents. Multifractal Rigidity

Y. Pesin

Thermodynamic Limit of Lyapunov Exponents

Y. Sinai

Pairing Rules for Lyapunov Exponents and Related Numerical Results

F. Bonetto

Transport Coefficients from Hamiltonian Dynamics for Periodic Fluids

L. Bunimovich

Thermodynamic Formalism and Onsager's Action Principle

G. Eyink

Open Session for Questions and Comments

E. Wayne, E. G. D. Cohen, J. L. Lebowitz

Introduction to and Survey of Recent Developments in the Derivation of
Hydrodynamical Limit from Microscopic Model Systems

R. Varadhan and H.-T. Yau

Spectral Theory of Thermal Relaxation

V. Jaksic

Radiation Damping for Hamiltonian Systems

A. Soffer

Polygonal Billiards with Point Obstacles

Y. Suhov

Recent Results on Genericity of Cocycles with Positive Lyapunov
Exponents

M. Nerurkar

Gravity Waves in Fluids

R. de la Llave

Decay Correlation in Hyperbolic Systems

D. I. Dolgopiat