4th WORKSHOP ON NONLINEAR DYNAMICS AND CHAOS
Courant Institute of Mathematical Sciences
New York University, 251 Mercer St., NY, NY 10012
March 23-24, 2001
*Sponsored by the Office of Naval Research, and the Courant Institute
and Department of Physics of New York University. Organizing Committee:*
L.-S. Young and G.M. Zaslavsky (Courant Institute).

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TITLES OF TALKS AND SPEAKERS


FRIDAY, MARCH 23, 2001 - Warren Weaver Hall 109

 8:30 -  8:50 Coffee and Bagels (Warren Weaver Hall Lobby)
 8:50 -  9:00 Opening
 9:00 -  9:40 Modelling the Primary Visual Cortex
              D.W. McLaughlin (CIMS-NYU)
 9:45 - 10:25 Lagrangian Chaos in Miscible and Immiscible Fluid Systems
              T. Solomon (Bucknell University)
10:30 - 11:00 Coffee Break
11:00 - 11:40 Several Geometric Mechanisms for Diffusion
              R. de la Llave (University of Texas)
11:45 - 12:25 Degenerate Decompositions and Bifurcations in Multiple
              Time-Scale Systems J. Guckenheimer (Cornell University)
12:30 -  3:00 Lunch Break
 3:00 -  3:40 A Supersymmetric Approach to Some Problems in Random Matrices
              T. Spencer (Intitute for Advanced Study)
 3:45 -  4:25 Asymptotic Scaling in a Simple Model of Hamiltonian Round-off
              J. Lowenstein (NYU Physics)
 4:30 -  5:00 Coffee Break
 5:00 -  5:40 From Invariant Curves to Strange Attractors
              L.-S. Young (CIMS-NYU)
 5:45 -  6:25 Directional Entropy in Lattice Dynamical Systems
              V. Afraimovich (S. Luis Potosi University)
 6:30 P.M. Reception (13th floor, Warren Weaver Hall)


SATURDAY, MARCH 24, 2001 - Warren Weaver Hall 101
 8:30 -  9:00 Coffee and Bagels
 9:00 -  9:40 A Review of Observations of Long Range Acoustic
              Transmissions through the Fluctuating Ocean
              J. Colosi (Woods Hole Oceanographic Institute)
 9:45 - 10:25 Underwater Acoustic Chaos
              G.M. Zaslavsky (Physics and CIMS, NYU)
10:30 - 10:45 Coffee Break
10:45 - 11:25 Thermodynamic Formalism and Navier-Stokes Equation
              Y. Sinai (Princeton University)
11:30 - 12:10 Remarkable Statistical Behavior for Truncated
              Burgers-Hopf Dynamics I. Timofeyev (CIMS-NYU)
12:15 -  1:45 Lunch Break
 1:45 -  2:25 Weyl Geometry and Gaussian Thermostats
              M.P. Wojtkowski (University of Arizona)
 2:30 -  3:10 Two Dimensional Turbulence: The Effect of Drag on
              the Energy Spectrum E. Ott (University of Maryland)
 3:15 -  3:20 Conclusion of Workshop
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