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).

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 (Institute 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