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PROGRAM OF THE 34TH STATISTICAL MECHANICS MEETING
Belfer Graduate School of Science
Yeshiva University
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For many years Yeshiva University has held semiannual one-day meetings on statistical mechanics. These meetings are extremely informal, with participants invited to present brief talks on their work. No proceedings of these meetings are published, so, as a service to the statistical mechanics community, the speakers and the titles of their work are listed below. In many cases, there is only one speaker listed although the work may have been done with collaborators. Also, many addresses are incomplete. Anyone who is interested in communicating with a speaker and who requires a more complete address may obtain it by writing to

Dr. Joel L. Lebowitz
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The Callan–Symanzik Equation, 3-D Ising Model Critical Indices
George A. Baker, Jr., Los Alamos

New Results on the Potts Model
F. Y. Wu, Physics Dept., Northeastern University

The Statistical Mechanics of Knots
Michael E. Fisher, Chemistry Dept., Cornell University

Asymptotic Behavior of Spacing Distribution of Eigenvalues of a Random Matrix
Freeman J. Dyson, Institute for Advanced Study

Onset of Turbulence in a Rotating Fluid
Harry Swinney and J. P. Gollub, Physics Dept., City College

A Kinetic Description of Fluid Turbulence
Harvey A. Rose, N.C.A.R., Colorado

Singular Behavior of the Navier–Stokes Equations at Long Wavelengths and Low Frequencies
D. R. Nelson and M. J. Stephen, Harvard University

Thermodynamic Correlation Functions for the Luttinger Model
Dietrich A. Uhlenbrock, Mathematics Dept., University of Wisconsin

Does One Need a New Order Parameter in Spatially Disordered Spin Systems?
David Sherrington, Imperial College, London

Some New Results in Lattice–Lattice Scaling
T. Guttman, University of Newcastle, Australia

One-Component Plasma in $2 + \epsilon$ Dimensions
Claude Deutsch, Orsay, France

Short Time Behavior of Velocity Correlation Functions
E. G. D. Cohen and I. de Schepper, Rockefeller University

Global Phase Diagram for Ternary Mixtures
D. Furman, Carnegie-Mellon University

Bicritical and Tetracritical Points in Antiferromagnetic Systems
David Mukamel, Cornell University

On the Kinetics of $S = 1$ Ising Model
Susanta Dattagupta, University of Alberta

Monte Carlo Study of Clusters and Percolation in 3-D
Amit Sur et al., Physics Dept., Yeshiva University

The Size Distribution of Clusters Near Percolation Threshold
Paul L. Leath, Physics Dept., Rutgers University

Lineal Extent of Clusters and Their Size Distribution for Critical Percolation
Ralph J. Harrison, G. D. Quinn, and G. H. Bishop, Army Materials

The Percolation Threshold in 2-6 Spatial Dimensions
Scott Kirkpatrick, IBM

Renormalization-Group Approach to Percolation Problems
Chandan Dasgupta, University of Pennsylvania

Application of Lattice Gas Models to Hydrogen–Metal Systems
Carol Hall, Chemistry Dept., Cornell University

Self-Consistent Phonon Calculations and Equations of State of Solid Hydrogen and Deuterium
Allan Anderson, Los Alamos

A Model for Isostructural Solid–Solid Phase Transitions
John M. Kincaid and George Stell, Mechanics Dept., State University of New York at Stony Brook

Impure Spin Systems: Two Elementary Theorems
H. Falk, Physics Dept., City College

Mean-Field Model for Nematic Liquid Crystals with Easy Arithmetic
Stefan Machlup and Philip L. Taylor, Case Western Reserve University

Mean-Field Theories of Nematic Liquid Crystals: Requirements for Self-Consistency
Martha A. Cotter, Chemistry Dept., Rutgers/Bell Labs.

The Use of Nonstandard Analysis in Physics
Pascal Gambardella, Chemistry Dept., State University of New York at Stony Brook

A Nonstandard Approach to the Thermodynamic Limit
Arnold Ostebee, Chemistry Dept., State University of New York at Stony Brook

Resummation Schemes for Memory Functions
Harold Friedman, Chemistry Dept., State University of New York at Stony Brook

Toward a Nonequilibrium Theory of Liquids: A Nonequilibrium Analogue of the Percus–Yevick Equation
Rodney L. Varley, Physics Dept., Hunter College

Nonuniform Fluids
Jerome Percus, New York University

Solution of Mean Spherical Integral Equation for the Two Yukawa Case
E. Waisman, I.N.T.I., Argentina, and Yeshiva University

Nonlinear Equations and (1-D) Statistical Mechanics
Alan R. Bishop, Cornell University

Placzek Corrections in Molecular Fluids: Solution of Mean Spherical Model for Electrolytes with Nonequal Diameters
Lesser Blum, University of Puerto Rico

Experimental Determination of the Equation of State of CO_2 Very Close to Its Critical Point
John White, Physics Dept., American University

Application of the Renormalization-Group Technique to the Compressible Ising Model: Transformation to a Continuous Spin Problem
Zvi Friedman and Leon Gunther, Duke University

Towards an Exact Description of the Correlation Function for Critical Scattering
Alan J. Bray, University of Maryland

Variation of Some Functionals in Boltzmann's Equation
Robert L. W. Chen, Physics Dept., Emory University

Critical Behavior of Transport Coefficients in Bose Systems
Joseph Sak, Rutgers University

Inverse Problem of Simple Plasma
S. Ahn, University of Pennsylvania

Molecular Dynamic Computations of Displacive Phase Transitions
T. Schneider, IBM

Virtual Ferromagnetism for Vector Spins in Two Dimensions
Robert Myerson, Pennsylvania State University

Critical Properties of Spin Glasses
A. B. Harris, T. C. Lubensky, and J. H. Chen, Physics Dept., University of Pennsylvania

Critical Exponents in Three Dimensions from Real Space Renormalization Group in Two Dimensions
Zvi Friedman, Duke University

Long Time Tails and the Renormalization Group
Dieter Forster, Temple University

Report on Various Recent Developments in Statistical Mechanics
Joel L. Lebowitz et al., Physics Dept., Yeshiva University