## Program of the Second Statistical Physics Days Istanbul Technical University 13–14 July 1995

## **INVITED TALKS**

Polymer/Polymer Interdigitation

Pierre Gilles de Gennes, ESPCI

Stretched Polymer Chains Under Forces and Flows; Stationary and Transient Regime

Françoise Brochard, ESPCI

Simulation of Protein Folding-A Coarse Grained Approach

Ivet Bahar, Bosphorus University

Interdiffusion at Polymer-Polymer Interfaces During Film Formation from High-T Latex Particles

Önder Pekcan, Istanbul Technical University

Critical Properties for Gelation in Free-Radical Cross-Linking Copolymerization

Oğuz Okay, TUBITAK MAM Research Center

A Numerical Study of the Two-Dimensional Potts Model via the Cluster Algorithm

Tarık Çelik, Hacettepe University

On Homogeneous Nucleation Theories from the Vapor Phase

Can F. Delale, Istanbul University

Microscopic Theory of Collective Excitations and Vortex Dynamics in Superfluid Systems

Ertuğrul Demircan, University of Texas

Real-Time Observation of Surface Structures During Epitaxial Growth and Phase Transition

Mehmet Erbudak, ETH Zurich

A Study of Quantum Bistability

Cemal Yalabık, Bilkent University

## SHORT COMMUNICATIONS

Hardness of "Late" and Weakly Crosslinked Polymethylmetacrylate and its Relationship to Chain Statistics,

Güngör Gündüz, Middle East Technical University

A Novel Correction Method for the Steady State Fluorescence Technique to Study Film Formation from High-T Latex Particles

Murat Canpolat, Önder Pekcan, Istanbul Technical University

Fluorescence Technique for Studying the Sol-Gel Transition in the Free Radical Crosslinking by Copolymerization of Methyl Methacrylate and Ethylene Glycol Dimethacrylate

Önder Pekcan, ITU, Yaşar Yılmaz, ITU, Oğuz Okay, TUBITAK MAM Multicanonical Simulation of the Hopfield Model

Fatih Yaşar, Tarık Çelik, Hacettepe University

A Mean Field Model for Liquid Crystals near the NAC Point Selami Salihoğlu, Hamit Yurtseven, ITU

A Theory of Melting of Molecular Crystals: The Complete Picture of Transition Temperatures

Şükru Özgan, Sütçü Imam University, Mustafa Keskin, Gaziosmanpasa University

Mean Field Theory for the Ising Model Within Generalized Statistical Thermodynamics

Fevzi Büyükkılıç, Doğan Demirhan, Uğur Tırnaklı, Ege University Calculation of a Phase Diagram for NH<sub>4</sub>Br

Hamit Yurtseven, Selami Salihoğlu, Aytekin Tüblek, ITU

Sm A-Sm C\* Phase Transition in Liquid Crystals

Agah Bağçe, Hamit Yurtseven, Selami Salihoğlu, Ahmet T. Giz, ITU Simulation of Four-Dimensional Ising Model on Creutz Cellular Automaton Nevzat Aktekin, Gazi University

Simulation of Diffusion on a Cellular Automaton in Two-Dimensional Space Mahmut Eken, Şeref Turan, TAEK, Nevzat Aktekin, Gazi University

Algebraic Approach to Calculating Lyapunov Exponents

Inanç Birol, Avadis Hacınlıyan, Bosphorus University

Vortex Tubes, Local Anisotropy, and Anomalous Scaling Ayse Erzan, TUBITAK MAM, ITU

Generalized Fractal Dimensions on Coupled Map Lattices Ayse Gorbon, ITU, Ayse Erzan, TUBITAK MAM, ITU

Analysis of Complex Time Series from Coupled Map Lattices Sevgi Çıkçı, Ayşe Erzan, ITU

Model for Describing the Critical Behavior of Polymer Mixture Solutions Mustafa Gençarslan, Erciyeş U., Mustafa Keskin, Gaziosmanpaşa U., Paul H. E. Meijer, The Catholic University of America Ferromagnetizm in Square Lattice with Two-Site Three-Spin Interaction and Uniaxial Anisotropy

H. Şevki Darendelioğlu, Selcuk University

Stable, Metastable, and Unstable Solutions of a Spin-1 Ising System in the Presence of Magnetic Fields Due to the Dipole and Quadrupole Moments

Mustafa Keskin, Gaziosmanpasa University, Hüseyin Arslan, Sütçü Imam University

Equilibrium Properties of the Spin-1 Ising System with Bilinear, Biquadratic, and Odd Interactions

Camir Tebirci, Yüzüncü Yil U., Ali Kökçe, Süleyman Demirel U., Mustafa Keskin, Gaziosmanpasa U.

Equilibrium State of Binary Solids in the Vacancy Formalism

Servet Ekmekçi, Trakya University

Variational Approach for Phonon Renormalization Effects in Photoexcited Ouantum Wires

Kaan Güven, Bilal Tanatar, Bilkent University

Dynamical Properties of Anharmonic Phonons at Low Temperatures Hakan Türeci, Tuğrul Hakioğlu, Bilkent University

The Effect of Interlayer Coupling on the Critical Temperature and Magnetic Field in High-T. Superconductors

Metin Hüner, Enver Nakhmedov, ITU

Spin-Wave Resonance Study in Amorphous NiMn and NiMnPt Alloy Films

Yıldırhan Öner, ITU, Mustafa Özdemir, Marmara University, B. Aktaş, High Technology Institute, E. A. Harris, University of Sheffield

Electron Fluid Model for DC Size Effect in Metallic Films

Hamza Polat, Abant Izzet Baysal University, Mehmet Tomak, ODTU The Role of Clustering for Antiferromagnetic Phase Transitions in  $\gamma$ -Mn Alloys

Hüseyin Gencer, Ali Bayri, Funda E. Atalay, Inönü University Degenerate Magnetic Structures and Antiferromagnetic Phase Transitions in γ-Mn Alloys

Ali Bayri, Huseyin Gencer, Funda E. Atalay, Inönü University Magnetic Diffuse Scattering in the Frustrated Square Lattice

Funda E. Atalay, Ali Bayrı, Hüseyin Gencer, Inönü University

Zn-Doped La<sub>2</sub>CuO<sub>4</sub> from <sup>139</sup>La NQR Relaxation and MSR

Fügen Tabak, Hacettepe U., M. Corti, A. Rigamonti, P. Carretta, Pavia U., F. Licci, L. Raffo, Inst. MASPEC

Nonlinear Phenomena in the Symmetric Phase of Layered Ferroelectric Materials

Ferid Salayev, ITU

Those wishing to obtain the complete mailing address or the e-mail address of any one of the speakers may do so by sending a message to feer-zan@cc.itu.edu.tr or writing to A. Erzan, Department of Physics, Faculty of Sciences and Letters, Istanbul Technical University, Maslak 80626, Istanbul, Turkey.