## Statistical Mechanics on the 45th Parallel II

21 and 22 October 1988, McGill University, Montreal, Quebec, Canada

Keynote Seminar André-Marie Tremblay, Université de Sherbrooke "Analogies between Multi-Fractals and Scaling"

Invited Talk
Martin Grant, McGill University
"Scaling and Growth in the Kinetics of First Order Phase Transitions"

Contributed Talks Chairman, A. Caille, Université de Sherbrooke

R. R. Tremblay, A. P. Siebesma, A. Erzam, and L. Pietronera, Université de Sherbrooke, University of Groningen, and University of Rome "Effects of Boundary Conditions in Multifractal Cascades"

V. Privman and N. M. Svrakic, Clarkson University "Transfer Matrix Spectrum for Systems with Interfaces"

N. M. Svrakic and V. Privman, Clarkson University "Lattice Animals: Some Exact Results"

J.-Y. Yuan, McGill University "Scaling and Localisation"

S. Lovejoy, P. Gabriel, and D. Schertzer, McGill University "Radiative Transfer and Fractal Clouds"

Contributed Papers Chairman, G. Forgacs, Clarkson University

Carolyn M. Van Vliet, Université de Montréal "On the Validity of Linear Response Theory"

L. G. Caron and C. Bourbonnais, Université de Sherbrooke "Renormalization in Quasi-One-Dimensional Organic Conductors and Superconductors"

A. Caillé and Martin Plumer, Université de Sherbrooke

"Theory of the Successive Magnetic Phase Transitions in Tetragonal RBa<sub>2</sub>Cu<sub>3</sub>O<sub>6+x</sub> Compounds"

M. L. Glasser and D. J. W. Geldart, Clarkson University

"Finite Temperature Approach to the Exchange Functional for the Inhomogeneous Electron Gas"

B. C. Eu, McGill University

"General Hydrodynamics"

Invited Talk

Gabor Forgacs, Clarkson University

"A Possible Physical Mechanism for Morphogenesis"

Contributed Papers

Chairman, M. Grant, McGill University

G. Torrie, P. G. Kusalik, and G. N. Patey, Royal Military College

"Structure of Water at a Charged Surface"

Miroslav Grmela, Ecole Polytechnique de Montréal

"Thermodynamics of the Bénard Cell"

Larry Schulman, Clarkson University

"Metastable Decay Rates and Analytic Continuation, Again"

R. Harris, M. Grant, and L. Jorgenson, McGill University

"Simulation of Interfaces in the Presence of Thermal Fields"

Contributed Papers

Chairman, R. Harris, McGill University

C. R. Doering and D. ben-Avraham, Clarkson University

"Inter-particle Distribution Functions and Rate Equations for Diffusion Limited Reactions"

K. Bassias and B. Frank, Concordia University

"Spin Glasses and Pattern Recognition"

M. Laradji, M. Grant, M. J. Zuckermann, and W. Klein, McGill University and Boston University

"Kinetics of 1st Order Phase Transitions: Scaling and Growth in 2-d Ising Models with Long Range Forces"

M. Sutton, McGill University

"More Time-Resolved X-Ray Diffraction"