

Andrzej Pękalski (Ed.)

# Diffusion Processes: Experiment, Theory, Simulations

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## PREFACE

The 1994 Max Born Symposium was the fifth organised by the Institute of Theoretical Physics of the University of Wrocław. Its main topic was, as suggested by the title, diffusion. On looking more closely at the phenomenon of diffusion we have discovered that it is omnipresent. Not only do many branches of physics use its concepts, but also it plays a vital role in many problems in astronomy, biology, geology, and even the social sciences! Hence we decided to invite lecturers representing a wide spectrum of points of view on the topic. We have asked physicists from different specializations - experimentalists, theoreticians, and "gamblers", i.e. the Monte Carlo people. As for non-physicists we have invited researchers in the domains of biology, astronomy, and geology. We hoped that such interdisciplinary talks would prove fruitful for all sides. As is the usual fate of such meetings, not all the speakers who had agreed to come were able to show up in Kudowa and therefore, e.g., we had no lecture on the role of diffusion in geology. On the other hand, Michel Droz, who was unable to attend the meeting, was kind enough to send us his lecture.

The lectures presented in this volume are organised only in two categories - invited and contributed talks. Otherwise the order follows the timetable of the symposium with courses on physics intermixed with those on biophysics or astronomy. Such an order reflects our belief that more and more we are coming to treating science as one body.

It is a pleasure to thank all the lecturers, some of them coming a long way, for their contribution not only to the scientific program, but also for creating a truly warm and friendly atmosphere at the symposium.

Numerous duties connected with the organization of the symposium have been carried out by friends and colleagues from the Institute of Theoretical Physics of the University of Wrocław - Dr. Cz. Oleksy, Dr. M. Dudek, Dr. M. Wolf, W. Hann, Z. Koza, K. Skwarek, M. Bordzań, and G. Czarnecki. Their help is gratefully acknowledged.

Our sponsors were first of all the University of Wrocław, then the Polish Academy of Sciences and the Batory Foundation. We thank them all.

At the end of the book we include the list of the lectures delivered at the fourth Max Born Symposium. The proceedings of that meeting have not been published.

Wrocław  
September 1994

Andrzej Pękalski  
Director of the Symposium

# Contents\*

## PREFACE

## INVITED LECTURES

Selfdiffusion of polymer chains in solutions and melts <i>K. Binder</i>	1
Diffusion on fractal substrates <i>R. Dekeyser, A. Maritan and A. L. Stella</i>	21
Stellar diffusion <i>H. Cugier</i>	37
Surface diffusion and lateral interactions in adsorbed layers <i>A. G. Naumovets, M. V. Paliy and Yu. S. Vedula</i>	53
Simple quantum dynamics in presence of topological disorder <i>A. Łusakowski and Ł. A. Turski</i>	65
Initially-separated reaction-diffusion systems: theory and experiments <i>H. Taitelbaum</i>	77
Anomalous reaction-diffusion systems <i>S. Havlin, M. Araujo, H. Larralde, A. Shehter, H. E. Stanley and P. Trunfio</i>	91
Some aspects of pattern formation in reaction-diffusion systems <i>M. Droz</i>	105
Interface bursting and interface depinning <i>J.-F. Gouyet</i>	115
Criticality of self-avoiding walks in fractal porous media <i>S. Milošević and I. Živić</i>	137
Fractals in biology and medicine <i>H. E. Stanley, S. V. Buldyrev, A. L. Goldberger, S. Havlin, R. N. Mantegna, S. M. Ossadnik, C.-K. Peng, F. Sciortino and M. Simons</i>	147
Diffusion of lattice gases in disordered lattices <i>K. W. Kehr and T. Wichmann</i>	179
Single-ion random walk on a lattice in an attractive coulomb cutoff potential <i>R. Kutner, D. Knödler, P. Pendzig, R. Przeniosło and W. Dieterich</i>	197

A model for the underpotential deposition of metals <i><u>D. A. Huckaby</u> and <u>L. Blum</u></i>	213
Oxygen diffusion in 123-YBCO <i><u>M. Ausloos</u> and <u>A. Pękalski</u></i>	221
Gating of voltage-dependent sodium channels in excitable membranes - a continuous process? <i><u>M. Bartoszkiewicz</u></i>	235
The Schrödinger problem <i><u>P. Garbaczewski</u> and <u>R. Olkiewicz</u></i>	249
<b>CONTRIBUTED PAPERS</b>	
Fractal dimension and roughness of profiles and surfaces <i><u>J. G. Moreira</u>, <u>J. Kamphorst Leal da Silva</u> and <u>S. Oliffson Kamphorst</u></i>	271
Competition between two kinds of entities in a diffusion-limited aggregation process <i><u>N. Vandewalle</u> and <u>M. Ausloos</u></i>	283
Diffusion models of internal dynamics of proteins <i><u>M. Kurzyński</u></i>	295
<b>LECTURES AT THE IV-TH MAX BORN SYMPOSIUM</b>	311

\* The names of the speakers are underlined