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# European Conference on ITERATION THEORY (ECIT 91)

Lisbon, Portugal

15 - 21 September 1991

*Editors*

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**EUROPEAN CONFERENCE ON ITERATION THEORY (ECIT 91)**

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## INTRODUCTION

ECIT 91, the 1991 European Conference on Iteration Theory, took place in Lisbon, from September 15 to 21, 1991, at the Colégio Pio XII, on the Universidade de Lisboa Campus. This was the 8th in a series of conferences on iteration which started in 1973 in Toulouse.

There were 57 participants, not counting accompanying persons, from the following 11 countries: Austria (3), Czechoslovakia (3), France (6), Germany (5), Hungary (1), Italy (6), Poland (7), Portugal (12), Spain (13), Switzerland (1), Ukraine (1).

There were 43 communications, from among others, on the following topics:

- turbulence and iteration
- characterization of chaos
- kneading theory
- symbolic dynamics
- bifurcation
- periods of maps
- topological dynamics
- discrete retarded dynamical systems
- cellular automata as dynamical systems
- iterative roots of formal power series
- iterative roots of polynomials
- phantom iterative roots
- iterative groups and semigroups, families of commuting functions
- algebraic aspects of iteration theory
- functional equations: the translation equation, iterative equations.

The scientific program ended with a "round table" discussion on iteration, focusing on present trends and problems for the future. The local organizers were J. Sousa Ramos, J. P. Lampreia and Ana Nunes.

An excursion took place, providing an introduction to the architectural treasures, the beautiful scenery and also to the culinary delights of the Lisbon area.

The members of the Scientific Committee were

- |                       |                         |
|-----------------------|-------------------------|
| G. L. Forti (Milano)  | L. Reich (Graz)         |
| J. Llibre (Barcelona) | A. Sharkovsky (Kiev)    |
| Ch. Mira (Toulouse)   | J. Smital (Bratislava)  |
| L. Paganoni (Milano)  | J. Sousa Ramos (Lisboa) |
| M. Pollicott (Porto)  | Gy. Targonski (Marburg) |

The basic idea again was to bring together "dynamicists" and "functional equationists" on (more or less) common ground: iteration theory. At any rate, interesting results were presented in both fields. Also the two groups continued to become acquainted with each other and with each other's work, and one day massive co-operation may result.

We thank Ana Nunes: as one of the three local organizers, she contributed much to the success of ECIT 91, both in the phase of preparation and during the conference. We are grateful to José Carlos Tiago de Oliveira. He found for us the Colégio Pio XII, the venue of our conference. Our sincere thanks are also due to Fundação Calouste Gulbenkian, Instituto Nacional da Investigação Científica and Junta Nacional da Investigação Científica e Tecnológica for financial support of the conference.

The next European Conference on Iteration Theory is planned for 1994, possibly in Hungary.

José Paulo Lampreia (*Lisboa*)

Jaume Llibre (*Barcelona*)

- Christian Mira (*Toulouse*)

José Sousa Ramos (*Lisboa*)

György Targonski (*Marburg*)

## CONTENTS

Introduction	v
Symbolic Dynamics and Norms of 0-1 Matrices <i>P. Almeida and J. Sousa Ramos</i>	1
Minimal Sets of Periods for Torus Maps <i>Ll. Alsedà, S. Baldwin, J. Llibre, R. Swanson and W. Szlenk</i>	8
A Structure Theorem for $C^2$ Functions Verifying the Misiurewicz Condition <i>F. Balibrea Gallego and V. Jiménez López</i>	12
Asymptotic Properties of the Translation Equation <i>L. Berg</i>	22
An Algorithm to Determine the Nature and the Transitions of Communication Areas Generated by a One-Dimensional Map <i>J.P. Carcasses</i>	27
Generic Properties for Interval Maps <i>M. Carvalho</i>	39
Periods for Transversal Maps of Spheres <i>J. Casasayas, J. Llibre and A. Nunes</i>	52
Lefschetz Zeta Function and Topological Entropy <i>J. Casasayas, J. Llibre and A. Nunes</i>	56
On Iterative Roots of Polynomials <i>B. Choczewski and M. Kuczma</i>	59
Bifurcation of Higher Harmonic Solutions in a Duffing-Rayleigh Equation <i>S. Dinar</i>	68

Bifurcations of a CO <sub>2</sub> Laser System <i>I. Djellit</i>	79
Kneading Theory for Some Non Continuous Degree One Maps of the Real Line into Itself <i>F. Esquembre</i>	90
Bifurcations Concerning the Embedding of a One-Dimensional Endomorphism into a Two-Dimensional Map <i>D. Fournier-Prunaret and Ch. Mira</i>	104
Global Analysis and Bifurcations in Two-Dimensional Endomorphisms by Use of Critical Curves <i>L. Gardini</i>	114
On the Uniqueness of Continuous Solutions of an Iterative Functional Inequality <i>B. Gawet</i>	126
Recouvrement Parallélisable Du Plan <i>M. Hmissi</i>	136
Chaos in Dynamical Systems with Randomly Perturbed Trajectories <i>K. Janková</i>	146
Commuting Functions and Invariant Measures <i>W. Jarczyk and K. Loskot</i>	157
On $\omega$ -Limit Sets of Triangular Maps <i>S. F. Kolyada and L. Snoha</i>	164
Periods for Klein Bottle Maps <i>J. Llibre</i>	166
On Some Codimension Three Bifurcations Occurring in Maps. Spring Area - Crossroad Area Transitions <i>Ch. Mira</i>	168

Chaotic Control <i>M. Morán</i>	178
On the Fractional Iteration of Endomorphisms <i>T. Narayaninsamy</i>	191
On the Ruelle-Tangerman Theorem for Zeta Functions <i>M. Pollicott</i>	201
On Power Series Transformations in One Indeterminate Having Iterative Roots of Given Order and with Given Multiplier <i>L. Reich</i>	210
Symbolic Dynamics of Iteration of Cubic Complex Maps <i>M. Sarreira and J. Sousa Ramos</i>	217
On a Theorem of Marc Krasner about Invariant Relations <i>A. Schleiermacher</i>	230
Problems of Turbulence Theory and Iteration Theory <i>A. N. Sharkovsky and E. Yu. Romanenko</i>	241
Hausdorff Dimension for Certain Near-Hyperbolic Maps <i>K. Simon</i>	253
Almost-Everywhere Set-Valued Iteration Semigroups <i>A. Smajdor</i>	262
Characterization of Mixed Iteration Groups <i>J. Tabor</i>	273
Organization of Bifurcations Generated from a Mathieu-Duffing Equation with a Double Periodic Excitation <i>A. K. Taha</i>	285
On a Class of Phantom Fractional Iterates <i>Gy. Targonski</i>	295

Bifurcations of Codimension Two Near Homoclinic Tangencies of Second Order <i>J. C. Tatjer</i>	306
A Study of Bifurcations in a Circular Real Cellular Automaton <i>J. Weitkämper</i>	319
A Formalism for Operations on Kuratowski-Whyburn Orbits <i>U. Wittmann</i>	330
Some Remarks on the Iterates of Commuting Functions <i>M. C. Zdun</i>	336
Discrete-time Delayed Dynamical Systems. An Example <i>F. Bofill, W. Szlenk and F. Vilamajor</i>	343
On the Full Periodicity Kernel for $\sigma$ Maps <i>J. Llibre, J. Paraños and J. A. Rodríguez</i>	352
List of Participants	355