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Cambridge University Press
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London Mathematical Society Lecture Note Series. 310

Topics in Dynamics and Ergodic Theory

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University Printing House, Cambridge CB2 8BS, United Kingdom
One Liberty Plaza, 20th Floor, New York, NY 10006, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
314-321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi - 110025, India
103 Penang Road, #05-06/07, Visioncrest Commercial, Singapore 238467

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www.cambridge.org

Information on this title: www.cambridge.org/9780521533652

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First published 2003

A catalogue record for this publication is available from the British Library

ISBN 978-0-521-53365-2 Paperback

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Preface

In the 60s and 70s, Katsiveli was the place where regular summer schools and various conferences took place under the aegis of the Academy of Sciences of Ukraine. An International Conference and US-Ukrainian Workshop “Dynamical Systems and Ergodic Theory” were held in Katsiveli (Crimea, Ukraine) during the period 21-30 August, 2000. The meeting which was dedicated to the memory of one of the best lecturers of the Katsiveli’s schools - Vladimir Mikhaïlovich Alexeyev, is an attempt to revive this tradition.

The conference and workshop has had no permanent funding. Their existence and function rely on financial aid from international and national organizations supporting the development of fundamental sciences.

There were 86 participants, coming from Australia, Austria, Azerbaijan, Canada, Czech Republic, Denmark, France, Germany, Israel, Korea, The Netherlands, Poland, P.R. China, Russia, Slovakia, Spain, Ukraine, United Kingdom, and the United States and from about 50 institutions working in many fields of Dynamical Systems and Ergodic Theory.

The meeting was consisted of 5 mini-courses (17 50-minute lectures), 30 50-minute lectures, 40 30-minute talks and the “Open Problems” section (see <http://iml.univ-mrs.fr/~kolyada/opds/>).

The proceedings of the conference will be published in two parts: 1) research papers & 2) mini-courses and survey papers. Research papers will be published in one issue of the journal *Qualitative Theory of Dynamical Systems*, mini-courses and survey papers in this book.

This meeting was organized by the Institute of Mathematics and the Institute for Low Temperature Physics and Engineering of the National Academy of Sciences of Ukraine together with Institut de Mathématiques de Luminy and Université de Tours, France.

The organizers of the International Conference and Ukrainian-US Workshop on Dynamical Systems and Ergodic Theory gratefully acknowledge the following organizations for their financial support: U.S. Civilian Research & Development Foundation (CRDF), INTAS OPEN-97 grant 1843 and INTAS Monitoring Conference Grants, Centre National de la Recherche Scientifique (CNRS, France), Ministry of Science and Education of Ukraine, European Science Foundation (Scientific Program PRODYN), Center for Dynamical Systems at the Penn State University (US), European Mathematical Society, ProMathematica (France).

Organizing Committee: P. Arnoux (Institut de Mathématiques de Luminy, France), V. Bergelson (Ohio University, US), S. Bezuglyi (co-chairman, Insti-

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tute for Low Temperature Physics and Engineering, Ukraine), F. Blanchard (Institut de Mathématiques de Luminy, France), S. Ferenczi (Université François Rabelais, France), B. Hasselblatt (Tufts University, US), S. Kolyada (co-chairman, Institute of Mathematics, Ukraine), E. Lesigne (Université François Rabelais, France), M. Malkin (Pedagogical University of Nizhny Novgorod, Russia), C. Mauduit (Institut de Mathématiques de Luminy, France), M. Misiurewicz (IUPUI, US), Z. Nitecki (Tufts University, US), A. Sharkovsky (Institute of Mathematics, Ukraine)

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