QUANTUM GROUPS
AND
QUANTUM SPACES

Editors of the Volume

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PREFACE

The present volume contains 36 selected contributions based on lectures delivered during the minisemester "Quantum Groups and Quantum Spaces", held November 6 – December 1, 1995, in the Stefan Banach International Mathematical Center in Warsaw. We hope that these research articles presenting original results give an up to date insight in what is actually happening in such subjects as locally compact quantum groups, quantum Lie algebras, braided Hopf algebras, Poisson Lie groups, noncommutative differential calculus, quantum principal bundles, symmetries of physical models, q-special functions.

The minisemester was organized as a sequence of four separate weeks, each week reflecting one of major aspects of the theory (topological, algebraic, semi-classical, applications to physics and special functions). Despite a little dull late autumn season, we were lucky to gather a considerable number of widely recognized mathematicians and mathematical physicists working in the field. During the minisemester, its distinguished guest, Prof. Alain Connes gave three excellent lectures on noncommutative geometric spaces.

The following is the list of (112) participants from 19 countries.

G. Arutyunov (Moscow), J. A. de Azcárraga (Burjasot), A. M. Baranovitch (Kiev), V. Bavula (Kiev), Yu. Bespalov (Kiev), G. Böhm (Budapest), Ph. Bonneau (Dijon), A. Borowiec (Wrocław), T. Brzeziński (Cambridge), C. Burdik (Prague), D. Calow (Leipzig), B. L. Cerchiai (Munich), Yu. Chapovsky (Kiev), V. Chari (Riverside), C. Chryssomalakos (Annecy), A. Connes (IHES), R. Conti (Rome), L. Dąbrowski (Trieste), Yu. Daletskii (Kiev), O. Dayi (Gebze), G. Delius (London), J. Dereziński (Warszawa), M. Dijkhuizen (Kobe), V. Dobrev (Sofia), B. Drabant (Amsterdam), M. Ðurđević (Mexico), M. Enock (Paris), Shao-Ming Fei (Bochum), F. Fidaleo (Rome), G. Fiore (Munich), A. Gavrilik (Kiev), K. Gawędzki (IHES), M. Gerstenhaber (Philadelphia), A. Giaquinto (Drawer), J. Grabowski (Warszawa), D. Gurevich (Valenciennes), P. Hajac (Trieste), I. Heckenberger (Leipzig), L. Hlavaty (Prague), P. Isaev (Dubna), T. Isola (Rome), B. Jurco (Olomouc), C. Juszczak (Wrocław), A. Kalyuzhnyi (Kiev), A. Kempf (Cambridge), P. Kiciński (Kraków), M. Klimek (Częstochowa), V. Koelink (Amsterdam), T. Koornwinder (Amsterdam), P. Kondratowicz (Warszawa), H. Kurose (Fukuoka), V. Kushnirevitch (Kiev), E. Lance (Leeds), M. Landstad (Trondheim) R. Lenczewski (Wrocław), J.-H. Lu (Tucson), J. Lukierski (Wrocław), V. Lyakhovsky (St. Petersburg), V. Lyubashenko (Kiev), Y. Maeda (Keio), S. Majid (Cambridge), W. Marcinek (Wrocław), T. Masuda (Tsukuba), O. Mathieu (Strasbourg), P. Minnaert (Bordeaux), M. Mozrzymas

(Wrocław), Y. Nakagami (Yokohama), H. Nakamura (Sapporo), Ch.-K. Ng (Oxford), A. Nowicki (Zielona Góra), A. Odzijewicz (Białystok), C. Ohn (Reims), M. del Olmo (Valladolid), V. Ostrovskii (Kiev), Z. Oziewicz (Mexico), A. Pal (New Delhi), A. Panasyuk (Warszawa), B. Pareigis (Munich), H. H. Phung (Munich), G. Podkolzin (Kiev), W. Pusz (Warszawa), P. Pyatov (Dubna), J. Quaegebeur (Leuven), J. Różański (Warszawa), Z.-J. Ruan (Urbana), S. Sachse (Munich), Yu. Samoilenko (Kiev), K. Schmüdgen (Leipzig), A. Schüler (Leipzig), A. Sciarrino (Napoli), J. Seifert (Munich), A. Sheu (Lawrence), S. Silvestrov (Umea), J. Sobczyk (Wrocław), J. Stokman (Amsterdam), P. Stovicek (Prague), A. Sudbery (York), M. Tarlini (Florence), V. Tolstoy (Moscow), L. Turowska (Kiev), K. Ueno (Tokyo), P. Urbański (Warszawa), L. Vainerman (Kiev), J. M. Vallin (Paris), A. Van Daele (Leuven), E. Vaysleb (Los Angeles), A. Vladimirov (Dubna), S. Wang (IHES), M. Welk (Leipzig), S. Woronowicz (Warszawa), S. Zakrzewski (Warszawa), M. Zhou (Tianjin).

There is something special in the atmosphere of meetings devoted to non-commutative generalizations of known theories. The efforts are concentrated on development of conceptions, ideas, even speculations, and one has a feeling of an adventure, typical for exploring a completely new area. In this subject, all questions and problems are new, while the solution is expected to be not too far from the commutative case.

The exciting subject together with the particular facility to continue discussions long after the lectures one has in the Banach Center, resulted in an unforgettable, very stimulating atmosphere during the conference.

We would like to thank all participants, and particularly the lecturers for their valuable contribution to this event. We should also like to thank all people which helped us with the organization, in particular Tom Koornwinder for his help to organize the section on Special Functions. The great help of Mrs Grażyna Pieścik-Bojarska from the Banach Center staff was essential for solving the everyday problems.

The Editors

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