5th

International Algebraic Conference in Ukraine

This volume contains papers based on the talks presented at the 5th International Algebraic Conference in Ukraine, which took place in Odessa on July 20–27, 2005. The conference was organized by Odessa I. I. Mechnikov National University, Kyiv Taras Shevchenko National University, Institute of Mathematics of National Academy of Sciences of Ukraine, Odessa A. S. Popov National Academy of Communication and Lugansk Taras Shevchenko National Pedagogical University.

The Local Organizing Committee consisted of Smytnyna V. A. (chairman), Varbanets P. D. (vice chairman), Kruglov V. Ye., Yevtuhov V. M., Leonov Yu. G. The Program Committee was presented by the scientists from 10 countries: Andriychuk V. I. (Lviv), Arnautov V. I. (Chisinau), Artamonov V. A. (Moscow), Bernik V. I. (Minsk), Bondarenko V. M. (Kiev), Chubarikov V. N. (Moscow), Dlab V. (Ottawa), Dokuchaev M. A. (Sao Paulo), Drozd Yu. A. (Kiev), Evtuhov V. M. (Odessa), Futorny V. M. (Sao Paulo), Golod E. S. (Moscow), Grigorchuk R. I. (Texas), Gudivok P. M. (Uzhgorod), Hrushovski E. (Jerusalem), Kashu A. I. (Chisinau), Katai I. (Budapest), Kirichenko V. V. (co-chairman, Kiev), Kochubei A. N. (Kiev), Komarnyts'kyi M. Ya. (Lviv), Krempa J. (Warsaw), Kurdachenko L. A. (Dnepropetrovsk), Latyshev V. N. (Moscow), Lyubashenko V. V. (Kiev), Marciniak Z. (Warsaw), Mikhalev A. V. (Moscow), Nesterenko Yu. V. (Moscow), Novikov B. V. (Kharkov), Ol'shanskii A. Yu. (Moscow), Parasiuk I. O. (Kiev), Perestiuk M. O. (Kiev), Petravchuk A. P. (Kiev), Protasov I. V. (Kiev), Ryabukhin Yu. M. (Chisinau), Samoilenko A. M. (Kiev), Sergejchuk V. V. (Kiev), Shemetkov L. O. (Gomel), Shestakov I. P. (Sao Paulo), Schinzel A. (Warsaw), Shmelkin A. L. (Moscow), Sushchansky V. I. (co-chairman, Gliwice), Usenko V. M. (Lugansk), Varbanets P. D. (Odessa), Yanchevskii V. I. (Minsk), Zarichnyi M. M. (Lviv).

More than 360 mathematicians from more than 20 countries (Armenia, Austria, Azerbaijan, Brazil, Byelorussia, Canada, China, France, Germany, Great Britain, Hungary, Iran, Italy, Lithuania, Moldova,

Netherlands, Poland, Russia, Switzerland, Turkey, Ukraine, USA) participated in the conference. The book of abstracts contained 287 ones.

The followings 9 sections were proposed at the conference: "Groups and Algebraic Dynamics" (Advisory Board: R. Grigorchuk, Yu. Leonov), "Group Theory" (Advisory Board: V. Sushchansky, A. Ol'shanskii), "Rings and Modules" (Advisory Board: V. Kirichenko, V. Futorny), "Theory of Representation and Linear Algebra" (Advisory Board: Yu. Drozd, B. Novikov), "Analytical Theory of Numbers" (Advisory Board: I. Katai, A. Laurinchikas, P. Varbanets), "Algebraic Geometry and Algebraic Theory of Numbers" (Advisory Board: V. Andriychuk, V. Yanchevskii), "Computer Algebra and Discrete Mathematics" (Advisory Board: I. Protasov, V. Ustimenko, V. Kozlovskii), "Topological Methods in Algebra" (Advisory Board: V. Lyubashenko, B. Gardner), "Semigroups and Algebraic Systems" (Advisory Board: V. Dlab, V. Usenko).

Plenary talks were presented by V. Arnautov (Moldova), L. Bartholdi (Switzerland), T. Ceccherini-Silberstein (Italy), V. Dlab (Canada), M. Dokuchaev (Brazil), Yu. Drozd (Ukraine), V. Futorny (Brazil), B. Gardner (Australia), R. Grigorchuk (USA), M. Hazewinkel (Netherlands), I. Katai (Hungary), V. Kaimanovich (Germany), S. Konjagin (Russia), A. Laurichikas (Lithuania), V. Lubashenko (Ukraine), I. Mineyev (USA), V. Nekrashevich (Ukraine), A. Nechaev (Russia), A. Ol'shansky (Russia-USA), I. Reznikov and V. Sushchansky (Ukraine, Poland), Yu. Ryabukhin (Moldova), W. Rump (Germany), I. Shestakov (Brazil), T. Smirnova-Nagnibeda (Switzerland), B. Zabavsky (Ukraine).

The cultural program of the conference was realized in 4 excursions: "Temples of Odessa", "Marine Port and Museum of Navy", "Museums of Odessa", "Odessa Sights".

The 1st Algebraic Conference in Ukraine was organized in 1997 in Slovyansk. The following three conferences were held in Vinnytsa, Sumy and Lviv. The next, 6th International Algebraic Conference in Ukraine will take place in 2007 in Kamyanets-Podilsky, the beautiful city with a lot of historical sights.

V. V. Kirichenko, V. I. Sushchansky, P. D. Varbanets