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Polish–Austrian Seminar on Functional Equations and Iteration Theory was held from October 26 to October 31, 1994 in Cieszyn (Poland) in the facilities of the Cieszyn–Branch of the Silesian University of Katowice. The past two meetings: "Seminar on Functional Equations Katowice–Graz" and "Austrian–Polish Seminar on Functional Equations and Iteration Theory" were organized by mathematicians from the Institute of Mathematics of the University of Graz (Austria) in May, 1986 and October, 1991, respectively.

The Cieszyn Seminar was organized by mathematicians from the Silesian University of Katowice within the frames of the official cooperation agreement between the Universities of Graz and Katowice. The organizers would like to thank the Polish Ministry of National Education and to the authorities of the Silesian University as well as those of Bielsko–Biała Branch of the Technical University of Łódź for their financial support. Let me express here the particular gratitude to the Rector of Bielsko–Biała Technical University and to Professor Janusz Matkowski for their substantial help.

The 34 participants came from Graz, Innsbruck and Vienna (Austria), Waterloo (Canada) and Bielsko–Biała, Gliwice, Katowice, Kraków and Rzeszów (Poland). In addition to 29 regular talks 5 **Problems and Remarks** sessions were organized. The talks encompassed the following topics: functional equations in several variables, iterative functional equations, iteration theory, conditional equations, Hyers–Ulam stability, set-valued solutions, convexity, dynamical systems and information theory.

Within the social program a coach excursion to Beskidy mountains was organized; during a party the participants were addressed by the Mayor of Cieszyn.

Titles of the talks as well as the list of participants follow in alphabetical order. The present special volume of the *Annales Mathematicae Silesianae* is entirely devoted to original papers submitted by the authors being simultaneously (with one exception) participants of the Seminar. For various reasons the publication of several further articles connected with the Seminar will be postponed to the next volumes of the *Annales*.

September, 1994

Roman Ger

TITLES OF THE TALKS

- Roman Badora, *On approximately additive functions*
- Karol Baron, *On approximate solutions of an iterative functional equation*
- Janusz Brzdęk, *On some conditional functional equations of Gołab-Schinzel type*
- Jacek Chmieliński, *Set-valued isometries on the real line*
- Stefan Czerwik, *Homogeneous functions and differential equations*
- Piotr W. Cholewa, *On approximately convex functions on Banach spaces with convex approximation property*
- Wolfgang Förg-Rob, *Some results on Schilling's problem*
- Roman Ger, *On a factorization of mappings with a prescribed behaviour of the Cauchy difference*
- Detlef Gronau, *On the functional equation $\varphi^{(m)}(x) = \frac{1}{m}\varphi(mx)$ arising from an asymptotic formula for the iterates of a function*
- Witold Jarczyk, *On nonnegative solutions of a convolution equation*
- Peter Kahlig, *On some extensions of the Gołab-Schinzel equation*
- Pl. Kannappan, *Functional equations in information theory*
- Zygfryd Kominek, *Convex functions and some set classes*
- Andrzej Lasota, *Invariant principle for discrete time dynamical systems*
- Zbigniew Leśniak, *On simultaneous Abel equations on the plane*
- Janusz Matkowski, *Some results on the Gołab-Schinzel equation*

- Janusz Morawiec, *On a problem of R. Schilling*
 Zenon Moszner, *Sur des fonctions des niveaux invariantement ordonnées*
 Norbert Netzer, *Fast Pilgerschritt-Transformation in the group of formal power series*
 Kazimierz Nikodem, *On hull-concave set-valued functions*
 Ludwig Reich, *Commuting formal power series and construction of iterative roots*
 Maciej Sablik, *Solutions of a functional equation stemming from approximation of iterates*
 Jens Schwaiger, *On homogeneous polynomials arising from n -linear functions and their stability*
 Justyna Sikorska, *On the Cauchy equation on spheres*
 Andrzej Smajdor, *On a functional equation connected with additive functions*
 Wilhelmina Smajdor, *Selections of bi-additive set-valued functions*
 Józef Tabor, *On some characterization of absolute value of an additive function*
 Janusz Walorski, *On some solutions of Schröder equation*
 Marek Cezary Zdun, *Iteration groups of singularity free homeomorphisms on the plane*

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INSTRUCTIONS TO AUTHORS

1. Manuscripts, written in one of the congress languages, should be submitted to Editorial Office: Instytut Matematyki, Uniwersytet Śląski, W. Bankowa 14, 40-007 Katowice, Poland. Authors of papers should send the original and one additional copy.

2. Authors should include with the manuscript an abstract of not more than 20 lines which contains a statement of the main result of the paper. Authors should also include an AMS classification of their paper.

3. The paper should be typed without corrections, with wide spacing between the lines. Symbols used should be as simple as possible (see *Manual for authors of mathematical papers* in the Bulletin of the American Mathematical Society, Volume 68, Number 5, September 1962). For bibliographic references please use the style and abbreviations used by "Mathematical Reviews".

4. In order to speed up the process of printing those authors who use computers are asked to provide also DOS 5 1/4 or 3 1/2 diskettes (.tex files for T_EX, L_AT_EX, AMS-T_EX if possible) with their articles.