

**ANNALES  
MATHEMATICAE  
SILESIANAЕ  
16 (2002)**

*Annales Mathematicae Silesianae* is published by the Silesian University. The journal publishes original research papers in pure and applied mathematics.

EDITORIAL OFFICE

Instytut Matematyki  
Uniwersytet Śląski  
ul. Bankowa 14  
40-007 Katowice  
Poland

# Annales Mathematicae Silesianae

---

16 (2002)

---

WYDAWNICTWO UNIwersYTETU ŚLĄSKIEGO  
KATOWICE 2003



PRACE NAUKOWE  
UNIwersYTETU  
ŚLĄSKIEGO  
W KATOWICACH  
NR 2142

EDITORIAL BOARD: Karol Baron, Aleksander Błaszczyk, Tadeusz Dłotko, Tomasz Dłotko, Roman Ger, Władysław Kulpa, Andrzej Lasota, Janusz Matkowski, Jerzy Mioduszewski, Ryszard Rudnicki, Kazimierz Szymiczek

## Contents

|  |    |
|--|----|
| TUNAY BILGIN: Matrix transformations in the sequence spaces $l_\infty^v(p, s)$ and $c_0^v(p, s)$ .....       | 7  |
| ZYGFRYD KOMINEK: On a problem of Wu Wei Chao.....  | 17 |
| JURAJ KOSTRA: Open problems on the relation between additive and multiplicative structure.....               | 21 |
| ŠTEFAN PORUBSKÝ: Sperner type theorems for generalized divisors.....   | 27 |
| LILIANA RYBARSKA-RUSINEK: String stability of singularly perturbed stochastic systems.....                   | 43 |
| STEVO STEVIĆ: On Bloch hyperharmonic functions.....  | 57 |
| TOMASZ SZOSTOK: On some conditional functional equations.....  | 65 |
| Problem session. The 4th Czech and Polish Conference on Number Theory.....                                   | 79 |
| Report of Meeting. The Second Debrecen–Katowice Winter Seminar on Functional Equations and Inequalities..... | 83 |

Projekt okładki

**Gerard Labus**

Copyright © 2003  
by Wydawnictwo Uniwersytetu Śląskiego  
Wszelkie prawa zastrzeżone

Wydawca  
Wydawnictwo Uniwersytetu Śląskiego  
ul. Bankowa 12B, 40-007 Katowice

Wydanie I. Nakład 250 + 50 egz. + 25 nadb. Ark.  
druk. 6,5. Ark. wyd. 7,5. Podpisano do druku w kwiet-  
niu 2003 r. Papier offset kl. III 80 g. 70 × 100.  
Cena 11 zł

This journal was typeset by  $\mathcal{A}_M\mathcal{S}$ - $\text{\TeX}$ , the  $\text{\TeX}$  macro system of the American Mathematical Society.

Skład komputerowy tekstu: Aleksandra Kaptur  
Instytut Matematyki, Uniwersytet Śląski

Druk i oprawa: Zakład Poligraficzny Marian Wiosła  
ul. 75. Pułku Piechoty 1, 41-500 Chorzów

ISSN 0208-6336

ISSN 0860-2107

## INSTRUCTIONS TO AUTHORS

1. Manuscripts, written in one of the congress languages, should be submitted to Editorial Office: Instytut Matematyki, Uniwersytet Śląski, 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  $\text{\TeX}$ ,  $\text{\TeX}$ ,  $\text{\TeX}$ ,  $\text{\TeX}$  if possible) with their articles.