

VOLUME 30 NO.1 2004-05

# REAL ANALYSIS EXCHANGE

## CONTENTS

EDITORIAL MESSAGE . . . . .	i
CONTRIBUTIONS . . . . .	iii
CONFERENCE ANNOUNCEMENTS . . . . .	v
RESEARCH ARTICLES	
Marcin Grande	
On the Measurability of Functions Satisfying Some Approximate Quasicontinuity Conditions . . . . .	1
Tord Sjödin	
A Note on the Harmonic Derivative . . . . .	11
Michal Ryszard Wojcik and Michal Stanislaw Wojcik	
Separately Continuous Functions with Closed Graphs . . . . .	23
Sergio Favier and Felipe Zó	
A Lebesgue Type Differentiation Theorem for Best Approximations by Constants in Orlicz Spaces . . . . .	29
Christian Richter	
Iterated Reduced Cluster Functions . . . . .	43
Stanislav Hencl	
Notes on Absolutely Continuous Functions of Several Variables . . . . .	59
Inga Jędrzejewska and Bożenna Szkopińska	
On Generalizations of Flett's Theorem . . . . .	75
Petteri Harjulehto, Peter Hästö and Mikko Pere	
Variable Exponent Lebesgue Spaces on Metric Spaces: The Hardy-Littlewood Maximal Operator . . . . .	87
Zbigniew Grande and Ewa Strońska	
Some Observations on Regular Dependence of Total Variation on Parameters . . . . .	105
Hugh G. R. Millington	
Runs and Integration . . . . .	115
Katarzyna Dems	
On $\mathcal{J}$ -Cauchy Sequences . . . . .	123
Harvey Rosen	
More About Sierpiński-Zygmund Uniform Limits of Extendable Functions . . . . .	129
Xianfu Wang	
Subdifferentiability of Real Functions . . . . .	137
Jozef Bobok	
On a Space of Besicovitch Functions . . . . .	173

Piotr Sworowski	
An Answer to Some Questions of Ene . . . . .	183
Varayu Boonpogkrong and Chew Tuan Seng	
On Integrals with Integrators in $BV_p$ . . . . .	193
F. S. Cater	
On Continuous N-Functions and An Example of Mazurkiewicz . . . . .	201
V. Chernyatin	
A New Necessary Condition for Existence of the Stieltjes Integral . . . . .	207
Ewa Strońska	
On Quasi-Uniform Convergence of Sequences of $s_1$ -Strongly	
Quasi-Continuous Functions on $\mathbb{R}^m$ . . . . .	217
K. M. Naralencov	
On Integration by Parts for Stieltjes-Type Integrals of	
Banach Space-Valued Functions . . . . .	235
Tomasz Natkaniec and Harvey Rosen	
An Example of an Additive Almost Continuous	
Sierpiński-Zygmund Function . . . . .	261

## INROADS

Marek Balcerzak and Katarzyna Dems	
Some Types of Convergence and Related Baire Systems . . . . .	267
Xiaorong Hou, Che Tat Ng, and Weinian Zhang	
Convergence of a Series Whose Terms Are Iterates of	
Quadratic Maps . . . . .	277
Franciszek Prus-Wiśniowski	
Separation by Ambivalent Sets . . . . .	289
Toh Tin-Lam and Chew Tuan-Seng	
On the Henstock-Fubini Theorem for Multiple Stochastic Integral . . . . .	295
Enrico Zoli	
No Transcendence Basis of $\mathbb{R}$ over $\mathbb{Q}$ Can Be Analytic . . . . .	311
F. J. González Viel	
A New Proof of a Liouville-Type Theorem for Polyharmonic	
Functions . . . . .	319
Lee Tuo-Yeong	
On the Dual Space of BV-Integrable Functions in Euclidean Space . . . . .	323
Giuseppa Riccobono	
A Riemann-Type Integral on a Measure Space . . . . .	329
Jacek Jachymski, Monika Lindner and Sebastian Lindner	
On Cauchy Type Characterizations of Continuity and	
Baire One Functions . . . . .	339
James V. Peters	
Radon Transforms of Tempered Distributions . . . . .	347
E. Kubińska	
Approximation of Carathéodory Functions and Multifunctions . . . . .	351

Valentin Skvortsov and Yuriy Zherybyov	
On Classes of Functions Generating Absolutely Continuous	
Variational Measures . . . . .	361
H. R. Shatery and J. Zafarani	
The Equality between Borel and Baire Classes . . . . .	373
Jan Kališ	
On Whitney Sets and Their Generalization . . . . .	385
Tomasz Natkaniec	
The Density Topology Can Be Not Extraresolvable . . . . .	393
Károly Simon and Hajnal R. Tóth	
The Absolute Continuity of the Distribution of Random Sums	
with Digits $\{0, 1, \dots, m - 1\}$ . . . . .	397

## QUERIES

F. S. Cater	
N-Functions: A Query . . . . .	411