A. Grytczuk, F. Luca and M. Wójtowicz

**Some results on** $\sigma(\phi(n))$ 263-275

**Abstract:** In [9] Makowski and Schinzel conjectured that the inequality $(*) \sum_{n=1}^{\infty} (\phi(n))^2 \geq \frac{1}{2}$ holds for all positive integers $n \geq 1$. In this paper we give various sufficient conditions for a positive integer $n$ to satisfy $(*)$.

Stevo Stević

**A generalization of the Copson’s theorem concerning sequences which satisfy a linear inequality** 277-282

**Abstract:** In this paper we give a proof of the following theorem:

Let $\varphi(x_1, x_2, \ldots, x_k)$ be a continuous real function on $\mathbb{R}^k$ which is nondecreasing in each variable and increasing in the first one and $\varphi(x, x, \ldots, x) \leq x$, for every $x \in \mathbb{R}$. If $(a_n)$ is a bounded sequence which satisfies the inequality

$$a_{n+k} \leq \varphi(a_{n+k-1}, a_{n+k-2}, \ldots, a_n), \text{ for } n \in \mathbb{N} \cup \{0\},$$

then it must be convergent.

László Tóth

**Asymptotic formulae concerning arithmetical functions defined by cross-convolutions, IX. On the product of certain functions** 283-295

**Abstract:** Let $A$ be a cross-convolution and define the functions $f_A$ and $f^*$ by $f_A(n) = \sum_{d \mid n} a(d)(n/d)^r$ and $f^*(n) = \sum_{d \leq n, (d, n/d)=1} h(d)(n/d)^s$, where $g$ and $h$ are bounded arithmetical functions, $g$ is multiplicative and $r, s > 0$. In this paper we establish an asymptotic formula for $\sum_{n \leq x} f_A(n)f^*(n)$ which extends and improves known results.

N. Parhi and S. Chand

**On oscillation of solutions of linear neutral hyperbolic equations** 297-315

**Abstract:** Sufficient conditions have been obtained for oscillation of solutions of a class of linear hyperbolic differential equations of neutral type with variable coefficients and Neumann boundary conditions. Unlike earlier studies, the problem cannot be reduced to a neutral differential inequality which does not admit a positive solution.
D. Türkoglu and B. Fisher
ON SOME NONEXPANSIVE TYPE MULTIVALUED MAPPINGS AND FIXED POINTS 317-322

Abstract: In this paper we prove a fixed point theorem for nonexpansive multivalued mapping in a complete metric space.

T. Pati
ON THE ABSOLUTE CESÁRO SUMMABILITY OF FOURIER SERIES 323-339

Fang Mingliang and Yuan Wenjun
ON THE NORMALITY FOR FAMILIES OF MEROMORPHIC FUNCTIONS 341-351

Abstract: For families of meromorphic functions in a domain, three criteria for normality are proved in this paper.

P. N. Natarajan
MATRIX TRANSFORMATIONS BETWEEN CERTAIN SEQUENCE SPACES OVER VALUED FIELDS II 353-358

Abstract: In this present paper, $K$ denotes a complete non-trivially valued field. If $A = (a_{nk}), a_{nk} \in k, n, k = 1, 2, \ldots$ is an infinite matrix, necessary and sufficient conditions for $A : c_0(p) \rightarrow Q, A : c(p) \rightarrow A, A : l_\infty \rightarrow Q$ are obtained.

Jyh-Chung Jeng and Young-Ye Huang
SOME BEST APPROXIMATION THEOREMS OF KY FAN TYPE 359-366

Abstract: We apply the $KKM$-map principle to obtain some best approximation theorems of Ky Fan type for both of single valued and multivalued continuous functions on closed convex subsets of a topological vector-space. Especially, in the setting of reflexive Banach space, Kapoor’s result [5] is generalized.

Biswanath Garai, Chhanda Bandyopadhyay and Chandan Chattopadhyay
DENSE SETS AND CD-SPACES 367-372

Abstract: In this paper defining cd-spaces in terms of dense sets, we have characterized cd-spaces and studied different properties of such spaces. In fact these spaces have been connected with spaces like resolvable, irresolvable, open hereditarily irresolvable, connected, etc.

M. D. Khan and Rahul Bharadwaj
A FIXED POINT THEOREM IN METRICALLY CONVEX SPACE 373-379

Abstract: A fixed point theorem is proved in a complete metrically convex metric space. Our result generalizes theorems of Assad [3] and Chatterjea [4].

M. Imdad
A FIXED POINT THEOREM VIA BEST APPROXIMATION 381-386

Abstract: A common fixed point theorem involving six mappings is proved in compact metric spaces which is also used to prove yet another fixed point theorem concerning best approximation. In process results due to Brosowski, Singh, Hicks-Humphries
B. S. Komal, T. K. Sharma and Vinay Khosla

Invertible and compact weighted composition operators on the space of continuously differentiable functions

Abstract: Some characterizations of compact and invertible weighted composition operators on the space of continuously differentiable functions are obtained in this paper.

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