

Indian Journal of Mathematics

Volume 34, No. 3, 1992

CONTENTS

U. C. DE and N. Guha

CONHARMONICALLY RECURRENT SASAKIAN MANIFOLDS 209-215

Abstract: The object of this paper is to study a Sasakian manifold which is conharmonically recurrent.

G. Das and Minatee Mohapatra

DEGREE OF APPROXIMATION OF FUNCTIONS BY THE (Z, γ, δ) TRANSFORM
OF ITS FOURIER SERIES 217-223

I. J. Maddox

ALMOST PERIODIC DOUBLE SEQUENCES 225-231

Abstract: Almost periodic double sequences with values in a Banach space are considered, together with related concepts.

Pramila Srivastava and Mona Khare

ON LATTICES OF FUZZY BASIC PROXIMITIES 233-245

Abstract: The present paper deals with the lattice structure of the family $M(X)$ of fuzzy basic proximities on X partially ordered by set inclusion. The notion of pointwise compatibility between fuzzy basic proximities has been introduced and some complete distributive sublattices of $M(X)$ have been investigated.

V. Popa and T. Noiri

ON UPPER AND LOWER θ -IRRESOLUTE MULTIFUNCTIONS 247-257

B. E. Rhoades

THE POINT SPECTRUM FOR DOUBLE HAUSDORFF MATRICES ON VARIOUS SPACES 259-263

Abstract: In a recent paper Okutoyi and Thorpe [2] determined the spectrum of the double Cesaro matrix of order 1, on the space $c_0(c_0,)$, where c_0 is the space of null sequence. In this paper we determine the point spectrum of a wide class of double Hausdorff matrices, considered as operators over $X(X)$, where X is any one of the spaces $c_0, l^p, 1 \leq p < \infty$, or c , the space of convergent sequences.

H. C. Lai and J. C. Lee

INTEGRATION THEORY FOR BANACH-VALUED MULTIFUNCTIONS*

265-284

Abstract: This paper establishes some fundamental theorems for integration theory of Banach-valued multifunctions. It is proved that the Fatou's type theorem and dominated convergence theorem hold for Hausdorff and Kuratowski limits. The double and iterated integrations for two-variable multifunction are discussed so that the Fubini type theorem is established in the case of multifunctions.

S. K. Bhattacharya, A. K. Saxena and A. Chaturvedi

A MODIFIED BESSEL INTEGRAL WITH A STATISTICAL APPLICATION

285-294

Abstract: An integral involving a modified Bessel function $K_v(\cdot)$ is evaluated and its application in the Bayesian regression analysis is illustrated via the multivariate modified Bessel distribution.

A. Kar and P. Bhattacharyya

BITOPOLOGICAL PREOPEN SETS, PRECONTINUITY AND PREOPEN MAPPINGS

295-309

Abstract: The concepts of preopen sets, precontinuity and preopen mappings in a bitopological space are introduced in this paper. The conditions under which the various properties enjoyed by the above concepts in a single topological space can be generalized into a bitopological space are investigated.
