

Indian Journal of Mathematics

Volume 37, No. 1, 1995

CONTENTS

D. N. Sarkhel

LEBESGUE INTEGRAL VERSUS DENJOY INTEGRALS 1-4

Abstract: We show that both the Denjoy-Khintchine and Denjoy-Perron integrals are definable as surprisingly simple limits of Lebesgue integrals of sequences of functions very closely related to the integrand.

Babu Ram and Satvinder Singh Bhatia

INTEGRABILITY AND L^1 -CONVERGENCE OF COMPLEX DOUBLE TRIGONOMETRIC SERIES WITH SPECIAL COEFFICIENTS 5-16

Abstract: Introducing a modified trigonometric sum $g_{mn}(x, y)$ of complex double trigonometric series, integrability and L^1 -convergence of complex double trigonometric series with special coefficients have been studied.

P. S. Kantawala and S. R. Agarwal

ON STRONG APPROXIMATION OF EULER MEANS OF ORTHOGONAL SERIES 17-26

Abstract: In this paper authors have generalised the results on strong approximation of $(E, 1)$ means [3] to strong approximation of (E, q) means of orthogonal series under the same conditions.

H. L. Bentley, H. Herrlich and W. N. Hunsaker

A BAIRE CATEGORY THEOREM FOR QUASI-METRIC SPACES 27-30

Ze-Qing Liu

ON COMPACT MAPPINGS OF METRIC SPACES 31-36

Abstract: Let f be a continuous compact self-mapping of a metric space (X, d) satisfying $d(fx, fy) < diam(\cup_{h \in H_f} h(O(x) \cup O(y)))$, for $x, y \in X$ with $x \neq y$, where $H_f = \{h|h : X \rightarrow X \text{ and } h \cap_{n=1}^{\infty} f^n X \subset \cap_{n=1}^{\infty} f^n X\}$. Then f and H_f have a unique fixed point, respectively. Furthermore, there exists an equivalent metric for X relative to which f is a Banach contraction.

Mileva Prvanović and Nevena Pušić

ON MANIFOLDS ADMITTING SOME SEMI-SYMMETRIC METRIC CONNECTION 37-67

Abstract: In this paper we introduce a new definition of simultaneous approximation, from which we obtain a version of Ky Fan theorem for two mappings and a generalization of approximatively compact sets.
