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CONTENTS

Abstract: The objective of this paper is to obtain sharp upper bound to the second Hankel determinant $|a_2a_4-a_3^2|$ for functions in certain subclass of analytic functions, using Toeplitz determinants.

Abstract: In 1999, the notion of $\mathcal{I}$-hyperconnected space was introduced and studied. In this paper, characterizations of several concepts in this space are given and we also derive some of the properties of these concepts. In particular, characterizations of $\mathcal{I}$-submaximal spaces are given and their properties are discussed.

Abstract: In this paper, we give some sufficient and necessary conditions for geodesic character of distributions on an almost Hermitian manifold, and generalize Bejancu's and Chen B. Y.'s

Abstract: Let $T^2[a,b]$ denote the linear space of all T^2-integrable functions whose second primitives are ACG^* in $[a,b]$. A suitable norm is introduced in the space $T^2[a,b]$. Representation of bounded linear functionals on this normed linear space is obtained. It is shown that this space is not complete.

Abstract: In this paper, we establish several new modular equations of degree 9 using Ramanujan's modular equations. We also establish several general formulas for explicit evaluations of $h_{9,n}$, $h'_{9,n}$, $l_{9,n}$ and $l'_{9,n}$. As an application, we establish some explicit evaluations for Ramanujan's cubic continued fraction.

Abstract: In this paper the concepts of a $(0,2)$-ideal, 0-minimal $(0,2)$-ideal, $(0,2)$-bi-ideal , 0-minimal $(0,2)$-bi-ideal and 0-$(0,2)$-bi-simple Γ-semiring are introduced. Several characterizations of 0-minimal $(0,2)$-ideal, 0-minimal $(0,2)$-bi-ideal and 0-$(0,2)$-bi-simple

Γ-semiring are furnished.

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A class of Salagean-type harmonic univalent functions with fixed finitely many coefficients 101-112

Abstract: In the present paper, we define and investigate a class of Salagean-type harmonic univalent functions with fixed finitely many coefficients. We obtain numerous sharp results including coefficient condition, extreme points, convex combination, convolution properties for the above class of harmonic univalent functions.

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