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Abdelkarim Boua and Lahcen Taoufiq

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Venkatesan Govindaraj and Raju K. George

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Eduardo Pascali

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$K \subset X$ is a non-void subset with its interior $K^\circ \neq \emptyset$. The other property gives a result on fixed points for contractive mappings.

Sahil Gupta and T. D. Narang

SEMICONtinuity OF THE METRIC PROJECTION AND RELATED
MAPS

193-208

Abstract: The semicontinuity of the metric projection and related maps have played a key role in discussing the structure of the approximating set and geometry of the space. In this paper, we discuss the upper semicontinuity and lower semicontinuity of the metric projection and related maps when the underlying spaces are metric linear spaces and metric spaces. The results proved in this paper generalize and extend several known results on the subject.

A. Sarkar, Amit Sil and Dipankar Biswas

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Abstract: One of the objects of the present paper is to show the relation between the ϕ -sectional curvature and ϕ -symmetry of a three-dimensional quasi-Sasakian manifold. Examples of three-dimensional quasi-Sasakian manifolds of constant ϕ -sectional curvature are given. Existence of a totally geodesic hypersurface of a three-dimensional quasi-Sasakian manifold is established and it is shown that such a totally geodesic hypersurface is not invariant.

**Hassan Al-Zoubi, Stylianos Stamatakis, Waseem Al-Mashaleh
and Mohammed Awadallah**

TRANSLATION SURFACES OF COORDINATE FINITE TYPE

227-241

Abstract: We consider translation surfaces in the 3-dimensional Euclidean space which are of coordinate finite type with respect to the third fundamental form III , i.e. their position vector \mathbf{x} satisfies

the relation $\Delta^{III}\mathbf{x} = \Lambda\mathbf{x}$, where Λ is a square matrix of order 3. We show that Sherk's minimal surface is the only translation surface satisfying $\Delta^{III}\mathbf{x} = \Lambda\mathbf{x}$.

C. Ramesha and T. Mohandas

CONVOLUTION PROPERTIES OF A NEW SUBCLASS OF THE CLASS
OF CLOSE-TO-CONVEX FUNCTIONS

243-254

Abstract: In this paper, we introduce and study the subordination and convolution properties of the class J_α , a subclass of the class of close-to-convex functions. The coefficient bounds and the effect of certain integral operators on J_α are discussed. It is derived that the class J_α is closed under convolution.

A. Jeeva, R. Selvakumar and M. Nalliah

FAMILIES OF GREATER b -CHROMATIC GRAPHS

255-261

Abstract: Given a graph G , b -coloring is a proper k -coloring of G in which every color class has at least one vertex that has a neighbour in each of the other color classes. Such a vertex is called a b -vertex. A set $S_0 \subseteq V$ is called a b -system if all the vertices in S_0 are b -vertices that belong to different color classes. The b -chromatic number is the largest integer k such that G admits a b -coloring with k colors. A greater b -chromatic graph is a graph G such that the b -chromatic number of G is greater than the b -chromatic number of every graph obtained from G by identifying two adjacent vertices, denoted by b_h -chromatic. In this paper, for any given graph G we constructed the graphs G^* , G^+ and G^{*+} . It is proved that G^* , G^+ are b_h -chromatic graph but G^{*+} is not b_h -chromatic graph. Further, we proved that the b -chromatic number of G^{*+} is neither equal nor less than the b -chromatic number of every graph obtained from G^{*+} by identifying any two adjacent vertices.

Tanusree Choudhury

KOMLÓS' THEOREM AND FATOU'S LEMMA IN $E(X)$

263-281

Abstract: Here we study Komlós' theorem and an approximate version of Fatou's lemma in the Köthe-Bochner space $E(X)$. We also prove some convergence theorems on $E(X)$
