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Hrushikesh Jena and Mahendra Kumar Jena

A NEW NON-STATIONARY TANGENT PLANE CONTINUOUS SUBDIVISION
SCHEME FOR ARBITRARY TRIANGULATIONS

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Abstract: In this paper, a new non-stationary subdivision scheme for arbitrary triangulation is introduced. The non-stationary subdivision scheme converges for triangulation of all possible valences: the limit surface is C^2 in case of a triangulation with all regular vertices while it is tangent plane continuous at extraordinary vertices except in case of valence 3. Moreover, the scheme reproduces the linear space $span\{1, x, y\}$. The performance of the scheme is shown with several examples starting with closed meshes of genus 0.

Sayali S. Joshi, Santosh B. Joshi and Haridas Pawar

A NEW SUBCLASS OF HARMONIC UNIVALENT FUNCTIONS DEFINED BY
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Abstract: In this paper, a new subclass of harmonic functions $SH_\delta^0(n, A, B, \alpha)$ in U is defined using differential subordination and other properties like coefficient bounds, distortion theorem, radii of starlikeness and convexity, compactness are obtained.

Abhijit Banerjee and Arpita Kundu

FURTHER INVESTIGATIONS ON TWO SHARED SET PROBLEMS UNDER
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Abstract: With the aid of different deficient values, we have established some uniqueness theorems for meromorphic functions sharing two sets. Our results have improved a number of earlier results such as ([4], [12]) in some sense. We have also provided two examples to show the sharpness of our result.

Abdelkarim Boua and Enaam Farhan

GENERALIZED HOMODERIVATIONS ON NEAR-RINGS

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Abstract: In this work, we study a new concept called "Generalized homoderivation". After, we present new interesting results for researchers in this area and generalize some results found in the literature, and finally, we enrich this paper with examples that demonstrate the need of the hypotheses presented.

Anu Choudhary, Swati Jasrotia and Kuldip Raj

APPLICATIONS OF FRACTIONAL DIFFERENCE OPERATOR TO DEVELOP
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Abstract: In this article, we propose some new binomial fractional difference sequence spaces by means of bounded sequence of positive real numbers. We show that the sequence space $b_p^{\sigma, \varsigma}(\Delta^{(\tilde{\beta})}, \nabla^m)$ is a BK-space. We also prove that the spaces $b_p^{\sigma, \varsigma}(\Delta^{(\tilde{\beta})}, \nabla^m)$, $b_{0,p}^{\sigma, \varsigma}(\Delta^{(\tilde{\beta})}, \nabla^m)$, $b_{c,p}^{\sigma, \varsigma}(\Delta^{(\tilde{\beta})}, \nabla^m)$ and $b_{\infty,p}^{\sigma, \varsigma}(\Delta^{(\tilde{\beta})}, \nabla^m)$ are linearly isomorphic to ℓ_p , $c_0(p)$, $c(p)$ and $\ell_\infty(p)$ spaces respectively. Moreover, we make an effort to study some inclusion relations between these spaces. In addition to this we determine the α - , β - and γ - duals of these spaces and examine some geometrical properties of the space $b_p^{\sigma, \varsigma}(\Delta^{(\tilde{\beta})}, \nabla^m)$.

Jervin Zen Lobo and Y. S. Valaulikar

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Renukadevi S. Dyavanal and Jyoti B. Muttagi

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