CONTENTS

Abstract: In this paper, we study a three-step iterative algorithm for Ciric quasi-contractive operator in the framework of CAT(0) spaces. Also we establish strong convergence theorems for above said scheme and operator. Our results improve and extend the corresponding results from the existing literature (see, e.g., [23, 24] and some others).

Abstract: In this attempt we present common fixed point theorem for generalized (φ, ψ)-weak contraction with new notion f-g reciprocal continuity in G-metric space. As an application, we present a theorem for (φ, ψ)-weak cyclic contraction.

Safeer Hussain Khan, Murat Ozdemir and Sezgin Akbulut

Abstract: Strong convergence results for two asymptotically quasi-nonexpansive mappings are obtained by using a general and independent two-step iterative process assuming compactness of only one of the two mappings and then under the condition (A'). Weak convergence is obtained under Opial's condition. Our results generalize a number of corresponding results in contemporary literature. Another interseting fact is that our results obtained even for only one mapping are new.

S. N. Mishra and Rajendra Pant

Abstract: In this paper, two important results of Petalas and Vidalis (Proc. Amer. Math. Soc. 118(1993) 819–821) which present positive solutions to the well known problem that neither non-expansive nor contractive mappings of a complete metric space have a fixed point, are extended to gneralized ultrametric spaces.

Ekrem Savas

Abstract: This paper presents the following definition which is a natural combination of the definition for asymptotically equivalent of order α, where $0 < \alpha < 1$, $\mathcal{I}$-statistical limit, and λ-statistical convergence. The two nonnegative sequences $x = (x_k)$ and $y = (y_k)$ are said to be asymptotically $\mathcal{I}^\lambda$-statistical equivalent of order α to

multiple L provided that for every $\varepsilon > 0$, and $\delta > 0$,

$$\{n \in \mathbb{N} : \frac{1}{\lambda_n^\alpha}|\{k \in I_n : |\frac{x_k}{y_k} - L| \geq \varepsilon\}| \geq \delta\} \in \mathcal{I},$$

(denoted by $x \overset{S_\lambda^L(I)^\alpha}{\sim} y$) and simply asymptotically $\mathcal{I}^\lambda$-statistical equivalent of order α if $L = 1$. In addition, we shall also present some inclusion theorems.

Aleksandar S. Cvetkovic, Stojan Radenovic, Suzana Simic and Marija P. Stanic

Abstract: In this paper we introduce the concept of a generalized φ-contraction for four mappings in solid cone metric spaces. Our results generalize, extend, unify, enrich and complement recent common fixed point results established by Chi-Ming Chen, Tong Huei Chang [Chi-Ming Chen, Tong-Huei Chang, Common fixed point theorems for a weaker Meir-Keeler type function in cone metric spaces, Applied Mathematics Letters 23 (2010) 1336-1341], I. Aranđelović et al. [I. Aranđelović, Z. Kadelburg, S. Radenović, Boyd-Wong-type common fixed point results in cone metric spaces, Applied Mathematics and Computation **217** (2011) 7167-7171] and A. Razani et al. [A. Razani, V. Rakočević, Z. Goodarzi, Generalized φ-contraction for a pair of mappings on cone metric spaces, Applied Mathematics and Computation **217** (2011) 8899-8906]. Some examples are included which illustrate the cases when new results can be applied while old one cannot.

Abdelkrim Aliouche and Carlos Simpson

Abstract: We look for common fixed subsets of several maps on a 2-metric space, aiming for fixed points or fixed lines. The properties

satisfied by the fixtures depend on the form of the triangle contractivity condition which is supposed, so for example in a weaker setting one of the possibilities is a subset of a line with small diameter. This is illustrated by some examples.

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