CONTENTS

Abstract: In this paper, we present some existence results for asymptotically regular generalized nonexpansive type operators on non-uniformly convex Banach spaces. We prove certain convergence results for a perturbed Mann algorithm. Some illustrative examples and numerical computations show the usefulness of these results. Finally, we give an application of our results to nonlinear integral equations.

Abstract: The Takagi function is well-known as a nowhere differentiable continuous function. In this paper, we expand the Takagi function by the Haar wavelet having a strong localization and the Shannon wavelet having a strong regularity.

Abstract: In this paper, we show a new fixed point theorem in a metric space. Moreover, we investigate the existence of solutions for the fractional finite difference inclusion and give an example to support our result.

Abstract: Following the path of H. H Chan, S. H. Chan and Z.-G. Liu, recently S. Cooper and D. Ye, and T. Huber, D. Schultz and D. Ye constructed new Ramanujan-type series for $\frac{1}{\pi}$ of level $4p$ for odd primes $p = 3$ and 5. Motivated by these in this article we construct the corresponding theory for prime $p = 7$.

Musharraf Ali, Mohd Ghayasuddin and Nabiullah Khan

Abstract: The main object of the present investigation is to propose a new extension of Whittaker function by making use of the extended confluent hypergeometric function defined by Ghayasuddin et al. [7]. Moreover, some integral representations, integral transforms (like Laplace and Hankel transforms) and a differential formula for our introduced Whittaker function are also pointed out.

Chahrazade Bakkari, Mohamed Es-Saidi and Najib Mahdou

Abstract: Let A be a commutative ring and let I be an ideal of A. In this paper, we give a characterization for the amalgamated duplication of A along I (denoted $A \bowtie I$) to be potent (respectively, complemented, fusible, unit-fusible).

Nikolay I. Dubrovin

Abstract: The rings of linear continuous operators on the topological spaces of $\mathcal{G}$-zero maps were described, where $\mathcal{G}$ is a filter on a set with an involution. This applies to modules of formal series with well ordered support over left ordered groups.

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