

ALMOST CONVERGENCE METHOD WITH FRACTIONAL ORDER OPERATOR

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Abstract: The purpose of this paper is twofold. First, basic concepts such as Gamma function, almost convergence, fractional order difference operator and sequence spaces are given as a survey character. Thus, the current knowledge about those concepts are presented. Second, we construct the almost convergent spaces with fractional order difference operator and compute dual spaces which are help us in the characterization of matrix mappings. After we characterize to the matrix transformations, we give some examples. In this paper, the notation $\Gamma(n)$ will be shown the Gamma function. For $n \in \{0, -1, -2, \dots\}$, Gamma function defined by an improper integral $\Gamma(n) = \int_0^{\infty} e^{-t} t_{n-1} dt$.

Keywords: Gamma Function, almost convergence, fractional order operator, matrix domain

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ON WIJSMAN ASYMPTOTICALLY DEFERRED STATISTICAL EQUIVALENT OF SEQUENCES	192
<i>Mikail ET</i>	
NECESSARY CONDITIONS AND SUFFICIENT CONDITIONS FOR NONEXISTENCE RESULTS TO CERTAIN EVOLUTION EQUATION	193
<i>Mohamed BERBICHE</i>	
ANALYTICAL SOLUTION OF A CLASS OF NONLINEAR VOLTERRA INTEGRAL EQUATIONS USING VARIATIONAL ITERATION METHOD	194
<i>Mohammed S. MECHEE, RaadM. KADUM</i>	
A NOT ON PROPERTIES THAT IMPLY THE FIXED POINT PROPERTY	195
<i>Mohammad KNEFATI, Vatan KARAKAYA</i>	
INTEGRAL TYPE ALMOST CONTRACTION MAPPINGS IN METRIC SPACES.....	196
<i>M. Abdussamed MALDAR, Vatan KARAKAYA</i>	
MAXIMUM NORM ANALYSIS OF SCHWARZ METHOD FOR ELLIPTIC QUASI-VARIATIONAL INEQUALITIES	197
<i>Mohammed BEGGAS, Mohamed HAIOUR</i>	
VARIATION DIMINISHING INTEGRAL OPERATORS OF THE CONVOLUTIONS TYPE ASSOCIATED WITH THE DUNKL OPERATOR ON R	198
<i>Moncef DZIRI</i>	
PERTURBED PARTIAL FRACTIONAL ORDER FUNCTIONAL DIFFERENTIAL EQUATIONS WITH INFINITE DELAY IN FRECHET SPACES.....	198
<i>Mouffak BENCHOHRA, Mohamed HELLAL</i>	
ON SHERMAN'S INEQUALITY.....	199
<i>Muhammad Adil KHAN</i>	
ON GENERALIZED DIFFERENCE SEQUENCES OF FUNCTIONS	199
<i>Muhammed ÇINAR, Mikail ET</i>	
INVERSE SOURCE PROBLEM FOR TIME-FRACTIONAL HEAT EQUATION WITH A GENERALIZED IMPEDANCE BOUNDARY CONDITION.....	200
<i>Muhammed ÇİÇEK, Mansur İSGENDEROĞLU (ISMAILOV)</i>	
A HYBRIDIZABLE DISCONTINUOUS GALERKIN METHOD FOR A CLASS OF FRACTIONAL BOUNDARY VALUE PROBLEM.....	201
<i>Mehmet Fatih KARAASLAN, Muhammet KURULAY</i>	
OSTROWSKI TYPE INEQUALITIES FOR GENERALIZED s -CONVEX FUNCTIONS IN THE SECOND SENSE	202
<i>Muharrem TOMAR, Erhan SET</i>	
ON I -CONVERGENCE OF SEQUENCES OF FUNCTIONS IN 2-NORMED SPACES	203
<i>Mukaddes ARSLAN, Erdi DÜNDAR</i>	
DEFECT-DEFERRED CORRECTION METHOD FOR A FLUID FLOW AT HIGH REYNOLDS NUMBERS	203
<i>Mustafa AGGÜL</i>	
ALMOST CONVERGENCE METHOD WITH FRACTIONAL ORDER OPERATOR	204
<i>Murat KIRIŞCI</i>	
ON SOME FIXED POINT THEOREMS WITH GENERALIZED CONTRACTIONS IN COMPLETE CONE METRIC SPACE ENDOWED WITH A PARTIAL ORDER AND INVOLVING A GRAPH	205
<i>Murat CANCAN</i>	
DISCUSSION ON ADVECTION-DIFFUSION EQUATION THROUGH FINITE DIFFERENCE SCHEMES	206
<i>Murat SARI, Lamia J.M. Al-MASHHADANI, Arshed A. AHMAD</i>	
THE GENERATING FUNCTIONS FOR THE FAMILY OF THE GENERALIZED BERNOULLI POLYNOMIALS	207
<i>Mustafa ALKAN</i>	
TWO NEW PROOFS OF GENERALIZED BIPERIODIC FIBONACCI IDENTITY IN TERMS OF THE DETERMINANTS OF TRIDIAGONAL MATRIX.....	207
<i>Yasin YAZLIK, Musa BAŞBÜK</i>	

Mehmet GÜMÜŞ	184
Mehmet GÜRDAL	303
Mehmet KÜÇÜKASLAN	180
Mehmet SEZER	170, 329
Mehmet ŞENGÖNÜL	274
Mehmet ŞENOL	185, 275
Melek Kübra AYHAN	186
Meltem KAYA	187
Merve AVCI-ARDIÇ	51
Merve İLKHAN	94, 188
Merve TEMİZER ERSOY	189
Meryem ÖZBUNAR	190
Mesut COŞKUN	191
Metin BAŞARIR	65, 94
Mikail ET	133, 192, 199
Mohamad JAWAD	58
Mohamed BERBICHE	193
Mohamed Dalah	324
Mohamed DALAH	327, 341, 345
Mohamed El Amine BENCHEIK LE HOCINE	342
Mohamed HAIOUR	197
Mohamed HELLAL	198
Mohamed NEHARI	351
Mohammad IMDAD	46, 181
Mohammad KNEFATI	195
Mohammad MURSALEEN	25
Mohammed BEGGAS	197
Mohammed DERHAB	351
Mohammed S. MECHEE	194
Moncef DZIRI	198
Mouffak BENCHOHRA	198
Muge TOGAN	163
Muhammad Adil KHAN	199
Muhammed ÇINAR	199
Muhammed ÇİÇEK	164, 200
Muhammet KURULAY	201
Muharrem TOMAR	202
Mukaddes ARSLAN	203
Murat BEŞENK	71
Murat CANSAN	205
Murat COBANER	293
Murat KIRIŞCI	204
Murat SARI	206
Musa BAŞBÜK	207
Mustafa ALKAN	207
Mustafa AYDIN	169
Mustafa Cemil BİŞGİN	208
Mustafa Ç. KORKMAZ	229
Mustafa KUDU	209
Mustapha CHEGGAG	231
Mutlay DOĞAN	210
Müfit ŞAN	211
Müzeyyen ERTÜRK	110, 212

N

N. BOUSSETILA	40
N. CHAOUCHKHOUE	322
N. DJITTE	218
N. ABADA	212
Nadir TRABELSI	284
Nadjet ABADA	322
Nazli KARACA	213
Nazneen KHAN	214
Necip ŞİMŞEK	215
Neslihan Fatma Er	216
Neslihan ZORLU	232
Nesrin MANAV	217
Nezrin GADIROVA	213
Nihal YOKUS	219, 221
Nihat AKGÜNEŞ	220
Nilay SAGER	350
Nimet COSKUN	219, 221
Nimet PANCAROĞLU AKIN	222
Nour El Houda BOUZARA	86, 222
Nouredine BENRABIA	223
Nurcan GÜCÜYENEN	224
Nurgül OKUR BEKAR	225
Nuri ÖZALP	241
Nurullah YILMAZ	127, 226
Nüket AYKUT HAMAL	122

O

O. DIOP	218
Olaniyi Samuel IYIOLA	317
Olgun CABRİ	227
Omar HIRZALLAH	157
Omer YAPMAN	228
Orhan Mazlum YAZAR	229
Orkun TAŞBOZAN	317
Osman ALAGÖZ	230
Osman Raşit IŞIK	80, 190
Ouahab ABDELGHANI	330
Ould Melha KHELLAF	231
Oya MERT	232
Ozer TALO	251

Ö

Ömer AKGÜLLER	182, 233
Ömer Faruk GÖZÜKIZIL	299
Ömer KİŞİ	103, 235, 273
Özer TALO	235, 314
Özge ÇOLAKOĞLU HAVARE	238
Özge DALMANOĞLU	239
Özlem AK GÜMÜŞ	236, 237, 343
Özlem ERSOY HEPSON	240
Özlem ÖZTÜRK MIZRAK	241