

3rd International Conference on Computational Mathematics and Engineering Sciences (CMES 2018)

ITM Web of Conferences Volume 22 (2018)

Girne, Turkey
4 – 6 May 2018

Editors:

**C. Cattani
A. Atangana
H. Bulut
Z. Hammouch**

**H.M. Baskonus
T. Mekkaoui
S. Agoujl**

ISBN: 978-1-5108-7315-5

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

This work is licensed under a Creative Commons Attribution license:
<http://creativecommons.org/licenses/by/2.0/>

You are free to:

Share – copy and redistribute the material in any medium or format.

Adapt – remix, transform, and build upon the material for any purpose, even commercial.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

You must give appropriate credit, provide a link to the license, and indicate if changes were made.

You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. The copyright is retained by the corresponding authors.

Printed by Curran Associates, Inc. (2018)

For additional information, please contact EDP Sciences – Web of Conferences
at the address below.

EDP Sciences – Web of Conferences
17, Avenue du Hoggar
Parc d'Activité de Courtabœuf
BP 112
F-91944 Les Ulis Cedex A
France

Phone: +33 (0) 1 69 18 75 75

Fax: +33 (0) 1 69 28 84 91

contact-edps@webofconferences.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

ON MAJORIZATION PROBLEMS ASSOCIATED WITH THE SUBCLASS $Q(J, \lambda, A, N)$ OF STARLIKE FUNCTIONS WITH POSITIVE COEFFICIENTS	1
<i>Baba Hüseyin, Kadioglu Ekrem</i>	
HIGH ORDER ITERATIVE METHODS FOR MATRIX INVERSION AND REGULARIZED SOLUTION OF FREDHOLM INTEGRAL EQUATION OF FIRST KIND WITH NOISY DATA	7
<i>Buranay Suzan Cival, Iyikal Ovgu Cidar</i>	
PENTAGONAL CONE B-METRIC SPACES OVER BANACH ALGEBRAS AND FIXED POINT THEOREM OF GENERALIZED LIPSCHITZ MAPPING	12
<i>Auwalu Abba</i>	
NUMERICAL INVESTIGATION OF ACOUSTICS PERFORMANCE OF LOW- PRESSURE DUCTED AXIAL FAN BY USING DIFFERENT TURBULENCE MODELS	18
<i>Bacak Aykut, Pinarbasi Ali</i>	
COMPARISON OF ENCRYPTION ALGORITHMS IN WIRELESS SENSOR NETWORKS	25
<i>Dener Murat</i>	
A FRESH LOOK TO EXACT SOLUTIONS OF SOME COUPLED EQUATIONS	30
<i>Karaagac Berat, Yagmurlu Nuri Murat, Esen Alaattin, Kutluay Selcuk</i>	
ON CHARACTERIZATION OF OPEN SETS IN EUCLIDEAN SPACES	35
<i>Muradov Firudin Kh.</i>	
NOVEL RECURSIVE APPROXIMATION FOR FRACTIONAL NONLINEAR EQUATIONS WITHIN CAPUTO-FABRIZIO OPERATOR	40
<i>Yavuz Mehmet</i>	
AN ALTERNATIVE APPROACH FOR NONLINEAR OPTIMIZATION PROBLEM WITH CAPUTO - FABRIZIO DERIVATIVE	47
<i>Evirgen F rat, Yavuz Mehmet</i>	
IMAGE CODING USING LAPLACE TRANSFORM	57
<i>Gençoğlu Muharrem Tuncay, Vural Mehmet</i>	
FOUR POINT IMPLICIT METHODS FOR THE SECOND DERIVATIVES OF THE SOLUTION OF FIRST TYPE BOUNDARY VALUE PROBLEM FOR ONE DIMENSIONAL HEAT EQUATION	63
<i>Buranay Suzan Cival, Farinola Lawrence Adedayo</i>	
A SOFT APPROACH TO RING-GROUPOIDS	68
<i>Oguz Gülay, Gürsoy M. Habil, İçen İlhan</i>	
OPTION OF THE OPTICAL-MECHANICAL POSITIONING OF THE SENSOR AND SAMPLE IN THE MAGNETOMETER. DETERMINATION OF MAGNETIC SUSCEPTIBILITY OF POWDERS AND PARTICLES	73
<i>Sandulyak Alexander, Sandulyak Anna, Kiselev Dmitriy, Polismakova Maria, Bulut Hasan</i>	
MEASUREMENT OF THE ACTUAL CONTACT AREA OF DETAILS BY THE POWER OF A REFLECTED LIGHT BEAM DIRECTED TO A CONTACT SURFACE COVERED WITH A FILM	79
<i>Titov Arkadiy, Sandulyak Anna, Baharev Mikhail, Sandulyak Alexander</i>	
A HIGHLY ACCURATE CORRECTED SCHEME IN SOLVING THE LAPLACE\’S EQUATION ON A RECTANGLE	85
<i>Dosiyev Ad güzel A., Sar kaya Hediye</i>	
AN APPROXIMATE GRID SOLUTION OF A NONLOCAL BOUNDARY VALUE PROBLEM WITH INTEGRAL BOUNDARY CONDITION FOR LAPLACE\’S EQUATION	90
<i>Dosiyev Ad güzel A., Reis Rifat</i>	
EXACT SOLUTIONS WITH LIE SYMMETRY ANALYSIS FOR NANO-IONIC CURRENTS ALONG MICROTUBULES	95
<i>Yüzbaşı Zühal Küçükarslan, Aslan Ebru Cavlak, Inc Mustafa</i>	
RISK ANALYSIS OF PORTS IN MARITIME INDUSTRY IN TURKEY USING FMEA BASED INTUITIONISTIC FUZZY TOPSIS APPROACH	99
<i>Senel Mine, Senel Bilgin, Havle Celal Alpay</i>	
ON NEW KNOT TABLES	109
<i>Elmalı Ceren Sultan, Ugur Tamer, Kunduraci Tuğçe</i>	
REPRESENTATION OF THE MATRIX FOR CONVERSION BETWEEN TRIANGULAR BEZIER PATCHES AND RECTANGULAR BEZIER PATCHES	114
<i>Sabancı İl Pembe, Kara Mustafa</i>	

USE AND COMPARISON OF TOPIS AND ELECTRE METHODS IN PERSONNEL SELECTION	119
<i>Senel Bilgin, Senel Mine, Aydemir Gizem</i>	
NOVEL EXACT SOLUTIONS OF THE EXTENDED SHALLOW WATER WAVE AND THE FOKAS EQUATIONS	129
<i>Duran Serbay, Karaagac Berat, Esen Alaattin</i>	
RISK ASSESSMENT WITH FAILURE MODE AND EFFECTS ANALYSIS AND GREY RELATIONAL ANALYSIS METHOD IN PLASTIC INJECTION PROCESS	134
<i>Ünlükal Ceren, Senel Mine, Senel Bilgin</i>	
ON INTUITIONISTIC FUZZY 2-METRIC SPACES	142
<i>Güner Elif, Çetkin Vildan, Aygün Halis</i>	
INSPECTION OF ARTIFICIALLY BUILT MECHANICAL FAILURES THROUGH INNOVATIVE CONDITION MONITORING TECHNIQUES	147
<i>Erol S. Seçkin, Meran Cemal</i>	
ASSESSMENT OF THE IMAGE DISTORTION IN USING VARIOUS BIT LENGTHS OF STEGANOGRAPHIC LSB	152
<i>Inan Yuçel</i>	
REPRODUCING KERNEL FUNCTIONS FOR LINEAR TENTH-ORDER BOUNDARY VALUE PROBLEMS	162
<i>Akgül Ali, Akgül Esra Karatas, Orcan Baris, Inc Mustafa</i>	
REPRODUCING KERNEL FUNCTIONS FOR THE GENERALIZED KURAMOTO-SIVASHINSKY EQUATION	167
<i>Akgül Ali, Akgül Esra Karatas, Korhan Sahin, Inc Mustafa</i>	
EXAMPLE OF A KINETIC MATHEMATICAL MODELING IN FOOD ENGINEERING	171
<i>Ertekin Özlem</i>	
SOME NEW CHARACTERIZATIONS OF PARALLEL TRANSLATION SURFACE ACCORDING TO BISHOP FRAME WITH TIMELIKE M_1 IN MINKOWSKI 3-SPACE	176
<i>Altay Suroglu Gülden</i>	
THE REVERSE OPERATION OF KNOT DIGRAPH NOTATION	181
<i>Ugur Tamer, Elmali Ceren Sultan, Yalaz Ferit</i>	
COMPLEX ACOUSTIC GRAVITY WAVE BEHAVIORS TO A MATHEMATICAL MODEL ARISING IN NONLINEAR MATHEMATICAL PHYSICS	186
<i>Aktürk Tolga, Sulaiman Tukur Abdulkadir, Baskonus Haci Mehmet, Bulut Hasan</i>	
ON THE WAVE SOLUTIONS TO THE TRLW EQUATION	192
<i>Sulaiman Tukur Abdulkadir, Unlu Canan, Bulut Hasan</i>	
INVESTIGATION OF EARTHQUAKE BEHAVIOUR OF CONSTRUCTION SYSTEM AND MATERIALS IN TRADITIONAL TURKISH ARCHITECTURE	197
<i>Yardımlı Seyhan, Dal Murat, M hlayanlar Esmâ</i>	
NEW WAVE SOLUTIONS FOR NONLINEAR DIFFERENTIAL EQUATIONS USING AN EXTENDED BERNOULLI EQUATION AS A NEW EXPANSION METHOD	205
<i>Duran Serbay, Kaya Dogan</i>	
REGARDING THE NUMERICAL SOLUTIONS OF THE SHARMA-TASSO-OLVER EQUATION	210
<i>Sulaiman Tukur Abdulkadir, Yokus Asif, Gulluoglu Nesrin, Baskonus Haci Mehmet</i>	
AL-KHWÂRİZMÎ'S PLACE AND IMPORTANCE IN THE HISTORY OF MATHEMATICS	219
<i>Duran Serbay, Samancı Hüseyin</i>	
PRE-SERVICE LOWER SECONDARY SCHOOL MATHEMATICS TEACHERS' ABILITY OF DRAWING THE SYMMETRY OF A FIGURE ACCORDING TO A LINE	223
<i>Mutlu Ebru, Duatepe-Paksu Asuman</i>	
A NOTE ON A BINARY RELATION CORRESPONDING TO A BIPARTITE GRAPH	229
<i>Sarı Hatice Kübra, Kopuzlu Abdullah</i>	
BRIEF NOTE ON SYSTEM SIGNATURE AND LONG TERM METHOD	234
<i>Gurcan Mehmet, Bugatekin Ayşe T.</i>	
POWER SIDE CHANNEL ANALYSIS AND ANOMALY DETECTION OF MODULAR EXPONENTIATION METHOD IN DIGITAL SIGNATURE ALGORITHM BASED FPGA	238
<i>Sönmez Burcu, Özer Ahmet Bedri</i>	
STUDY OF THREE DIMENSIONAL LAMINAR FORCED CONVECTION OF NANO FLUID FLOW THROUGH ECCENTRIC RECTANGULAR ANNULAR DUCT	243
<i>Eltorky Amr G., Elhelw Mohamed, Fayed Mohamed, Attia Abdelhamid</i>	
SOME SPECTRAL PROPERTIES OF P-LAPLACIAN DIFFUSION BOUNDARY VALUE PROBLEM ON TIME SCALES	254
<i>Gulsun Tuba, Yılmaz Emrah, Kayal Meltem</i>	

APPROXIMATE SOLUTIONS OF TWO-DIMENSIONAL BURGERS' AND COUPLED BURGERS' EQUATIONS BY RESIDUAL POWER SERIES METHOD	260
<i>Gulsen Selahattin, Inc Mustafa, Nabi Harivan R.</i>	
ON THE SOLUTIONS OF FRACTIONAL CAUCHY PROBLEM FEATURING CONFORMABLE DERIVATIVE.....	266
<i>Yavuz Mehmet, Özdemir Necati</i>	
EXTENSIONS OF HADAMARD CODES DEFINED ON RINGS	273
<i>Özkan Mustafa, Öke Figen</i>	
ON GRAY IMAGES OF CONSTACYCLIC CODES	278
<i>Özkan Mustafa, Öke Figen</i>	
COMPARISON OF DIFFERENT ALGORITHMS IN THE RADIOTHERAPY PLANS OF BREAST CANCER.....	284
<i>Çelen Yonca Yahsi, Evcin Atilla</i>	
DIFFERENTIATION OF USING FLATTENING FILTER FREE ENERGY IN VMAT PLANS FOR PROSTATE CANCER.....	289
<i>Çelen Yonca Yahsi, Evcin Atilla</i>	
ON THE SOLUTIONS OF SOME DIFFERENCE EQUATIONS SYSTEMS AND ANALYTICAL PROPERTIES.....	294
<i>Tuz Münevver</i>	
EVALUATION OF CAR PERFORMANCES USING DATA ENVELOPMENT ANALYSIS	300
<i>Güral Yunus, Bugatekin Ayse Turan</i>	
LACUNARY STATISTICAL CONVERGENCE OF ORDER ALPHA AND LACUNARY STRONGLY SUMMABLE SEQUENCES OF ORDER ALPHA OF GENERALIZED DIFFERENCE SEQUENCES.....	305
<i>Et Mikail, Sengül Hacer, Çinar Muhammed</i>	
OPTICAL SOLITONS AND OTHER SOLUTIONS TO THE (2+1)-DIMENSIONAL CUBIC NONLINEAR SCHRÖDINGER EQUATION WITH FRACTIONAL TEMPORAL EVOLUTION.....	312
<i>Atas Sibel Sehriban, Sulaiman Tukur Abdulkadir, Bulut Hasan</i>	
ANALYSIS OF REPAIRABLE K-OUT-OF-N SYSTEM MODEL USING INTER-ARRIVAL FAILURE TIMES	318
<i>Gürcan Mehmet, Güral Yunus, Gökdere Gökhan</i>	
A SURVEY ON PHOTO FORGERY DETECTION METHODS	322
<i>Gurunlu Bilgehan, Ozturk Serkan</i>	
INVESTIGATION OF DARK AND BRIGHT SOLITON SOLUTIONS OF SOME NONLINEAR EVOLUTION EQUATIONS	327
<i>Demiray Seyma Tuluçe, Bulut Hasan</i>	
DYNAMIC RELIABILITY EVALUATION OF LINEAR CONSECUTIVE K-OUT-OF-N0: F SYSTEM WITH MULTI-STATE COMPONENTS.....	332
<i>Gökdere Gökhan, Gürcan Mehmet</i>	
(λ, μ) STATISTICAL CONVERGENCE OF ORDER γ FOR DOUBLE SEQUENCES OF FUNCTIONS.....	336
<i>Çinar Muhammed, Seker Dilan, Et Mikail</i>	
ON ROUGH CONVERGENCE VARIABLES OF TRIPLE SEQUENCES.....	341
<i>Özdemir M. Kemal, Esi Ayhan, Esi Ayten</i>	
BERNSTEIN OPERATOR OF ROUGH I-CORE OF TRIPLE SEQUENCES	345
<i>Özdemir M. Kemal, Esi Ayhan, Esi Ayten</i>	
ON THE EXACT AND NUMERICAL SOLUTIONS TO A NONLINEAR MODEL ARISING IN MATHEMATICAL BIOLOGY	354
<i>Yokus Asif, Sulaiman Tukur Abdulkadir, Baskonus Haci Mehmet, Atmaca Sibel Pasali</i>	
CONSTRUCTION OF VARIOUS SOLITON SOLUTIONS VIA THE SIMPLIFIED EXTENDED SINH-GORDON EQUATION EXPANSION METHOD	364
<i>Sulaiman Tukur Abdulkadir, Bulut Hasan, Baskonus Haci Mehmet</i>	
ON THE EXACT SOLITARY WAVE SOLUTIONS TO THE LONG-SHORT WAVE INTERACTION SYSTEM	373
<i>Baskonus Haci Mehmet, Sulaiman Tukur Abdulkadir, Bulut Hasan</i>	
STABILITY ANALYSIS, NUMERICAL AND EXACT SOLUTIONS OF THE (1+1)-DIMENSIONAL NDMBBM EQUATION	384
<i>Yokus Asif, Sulaiman Tukur Abdulkadir, Gulluoglu Mehmet Tahir, Bulut Hasan</i>	
A NEW METHOD FOR (4+1) DIMENSIONAL FOKAS EQUATION.....	394
<i>Demiray Seyma Tuluçe, Bulut Hasan</i>	
Author Index	