

## DRAFT ABSTRACT BOOK CONTENTS 12-06-2016

ANA MARIA ACU, PURSHOTTAM AGRAWAL AND TRAPTI NEER	
<i>Direct results for certain operators based on Pólya distribution . . . . .</i>	1
OCTAVIAN AGRATINI	
<i>On modified Picard and Gauss linear positive operators . . . . .</i>	1
FRANCESCO ALTOMARE	
<i>On a class of initial-boundary value differential problems on <math>[0, 1]</math> related     to generalized Kantorovich operators . . . . .</i>	1
MIRCEA BALAJ	
<i>Existence Criteria For the Solutions of a Variational Relation Problem .</i>	2
ADINA ELENA BĂRAR, DANIELA IOANA INOAN AND IOAN RAȘA	
<i>Entropies associated to <math>q</math>-distributions of probability . . . . .</i>	2
ALINA BARBULESCU	
<i>On the relationship between the statistical properties of the time series     and its GRNN model . . . . .</i>	2
GÜLEN BAŞCANBAZ-TUNCA, MURAT BODUR AND DILEK SÖYLEMEZ	
<i>A new generalization of Lupaş operators . . . . .</i>	3
MAHER BERZIG, CRISTINA-OLIMPIA RUS AND MIRCEA-DAN RUS	
<i>The contraction mapping principle: beyond metric spaces and back . . .</i>	3
MARIUS BIROU AND FADEL NASAIREH	
<i>Rates of convergence for the iterates of some positive linear operators .</i>	4
OCTAVIA-MARIA BOLOJAN	
<i>Delay Evolution Systems with Nonlinear Constraints . . . . .</i>	4
JANUSZ BRZDEK AND MAGDALENA PISZCZEK	
<i>Fixed points of some nonlinear operators in the spaces of multifunctions</i>	5
ANGELA BUDESCU AND RADU PRECUP	
<i>Variational fixed points problems and applications to singular differential     equations and systems . . . . .</i>	5
ADELA CAPĂȚĂ	
<i>Characterizations of vector equilibria with explicit constraints . . . . .</i>	6
NURSEL ÇETİN	
<i>Some results on Jain type operators . . . . .</i>	6
LUMINIȚA-IOANA COTÎRLĂ	
<i>Properties of the analytic functions defined by an integral operator . . .</i>	6
ANA-MARIA CROICU	
<i>What Everyone Ought to Know About Optimal Control Applied in Medicine</i>	7
OVIDIU FURDUI AND ALINA SÎNTĂMĂRIAN	
<i>Series involving tails of Riemann zeta function values . . . . .</i>	7

BOGDAN GAVREA	
<i>Time stepping schemes for a class of hybrid dynamical systems . . . . .</i>	7
ANA-MARIA GECZI, CALIN NEAMTU AND DALIA CIMPEAN	
<i>A study of water pressure optimization for a city network . . . . .</i>	7
DORIN GHISA	
<i>Riemann type of functional equation . . . . .</i>	8
VIJAY GUPTA, FLORIN SOFONEA AND ANA MARIA ACU	
<i>Approximation of Baskakov type Pólya-Durrmeyer operators . . . . .</i>	8
DIANA HERLEA	
<i>Positive solutions for Neumann-Robin BVPs with <math>\phi</math>-Laplacian . . . . .</i>	8
ADRIAN HOLHOȘ	
<i>Two area preserving maps from the square to the p-ball . . . . .</i>	9
VASILE HOREA ILE	
<i>Logic type functions in some problems of deformable body mechanics . . . . .</i>	9
MARIA ANASTASIA JIVULESCU, ION NECHITA AND PAȘC GĂVRUȚA	
<i>Some decompositions of positive operators related to quantum information theory . . . . .</i>	10
JÓZSEF KOLUMBÁN AND MARCEL BOGDAN	
<i>On the stability of solutions for a system of inequalities . . . . .</i>	10
SZILÁRD CSABA LÁSZLÓ	
<i>The minimization problem of a convex function on dense sets . . . . .</i>	10
TANIA ANGELICA LAZĂR, VASILE LUCIAN LAZĂR AND GABRIELA PETRUȘEL	
<i>Coupled fixed point for <math>\varphi</math>-contractions in b-metric spaces . . . . .</i>	10
DANIELA MARIAN, IOAN RADU PETER AND CORNEL PINTEA	
<i>Some generalized monotone operators . . . . .</i>	11
ION MIHOC AND CRISTINA-IOANA FĂTU	
<i>About some mathematical and informational characterizations of Weibull's distribution based on the survival analysis . . . . .</i>	11
GRADIMIR V. MILOVANOVIĆ	
<i>Efficient quadrature processes for computing integrals of highly oscillatory functions and some classes of special functions . . . . .</i>	12
NICUSOR MINCULETE	
<i>On the Cauchy-Schwarz inequality in an inner product space . . . . .</i>	12
ALEXANDRU MITREA	
<i>Double condensation of singularities for a class of product quadrature rules of interpolatory type on Jacobi nodes . . . . .</i>	12
GABRIELA RALUCA MOCANU AND IOAN RAȘA	
<i>Radiation of charged particles undergoing drift/diffusion . . . . .</i>	13
ROZICA GABRIELA MOGA, DANIEL MOGA AND VLAD MURESAN	
<i>Efficient approximations for fractional order controllers . . . . .</i>	14

VIORICA MUREȘAN	
<i>Gronwall lemma and applications</i> . . . . .	14
ANDREI NEAG	
<i>Isogonal transformations in hyperbolic plane</i> . . . . .	15
ADELA NOVAC	
<i>A Perov type result in gauge spaces and application to integral systems on semi-axis</i> . . . . .	15
ENGEL OLGA AND SZÁSZ RÓBERT	
<i>Preserving properties of the generalized Bernardi-Libera-Livingston integral operator defined on some subclasses of starlike functions</i> . . . . .	15
AGNES ORSOLYA PALL-SZABO	
<i>Modified Hadamard product properties of certain class of analytic functions with varying arguments defined by Sălăgean derivative</i> . . . . .	16
RADU PĂLTĂNEA	
<i>Estimating the degree of approximation with Ditzian-Totik modulus</i> . . . . .	16
LORAND-GABRIEL PARAJDI, RADU PRECUP AND EDUARD-ALEXANDRU BONCI	
<i>A mathematical model of the transition from the normal hematopoiesis to the chronic and acceleration-acute stages in myeloid leukemia</i> . . . . .	17
IOAN RADU PETER	
<i>A bound of the Finslerian Ricci scalar</i> . . . . .	17
CORNEL PINTEA	
<i>Monotone operators. Applications</i> . . . . .	18
EMILIA LOREDANA POP AND DOREL DUCA	
<i>Some applications for scalar and vector optimization problems</i> . . . . .	18
VASILE POP	
<i>The number of sums and differences for a set</i> . . . . .	18
RADU PRECUP	
<i>Positive standing wave solutions for Schrödinger equations with oscillating state-dependent potentials</i> . . . . .	18
VOICHIȚA ADRIANA RADU AND ANA MARIA ACU	
<i>Approximation properties of the iterates of some linear positive operators depending on a parameter</i> . . . . .	19
MOHSEN RAZZAGHI	
<i>Orthogonal functions and hybrid approximations in calculus of variations and control theory</i> . . . . .	20
POONAM SHARMA, R. K. RAINA AND GRIGORE ȘTEFAN SĂLĂGEAN	
<i>Geometric Properties Involving a New Fractional Operator</i> . . . . .	20
GHEORGHE TIGAN	
<i>Periodic orbits in a non-smooth discrete map</i> . . . . .	20
LIANA TIMBOȘ	
<i>Duality for an extended equilibrium problem</i> . . . . .	20

The 15th International Conference  
on Applied Mathematics and Computer Science,  
Cluj-Napoca, July 5–7, 2016.

---

Theodor Angheluță Seminar

---

CONSTANTIN-COSMIN TODEA

*Basic Morita equivalences and cohomology of block algebras of finite groups* 21

ADRIAN VIOREL

*Nonlocal Cauchy problems at infinity* . . . . . 22

MIHAI VORNICESCU AND NECULAE VORNICESCU

*A new elementary proof of Arzela's theorem for the Riemann integrable functions* . . . . . 22

INDEX OF AUTHORS . . . . . 24