

Monday, August 19, 2013

Conference MITRE-2013

Monday, August 19, 2013

08.00–09.45 **Registration** (Main building, lecture room 137, hall).

10.00–10.10 **Opening ceremony** (Main building, lecture room 137)

Plenary session (Main building, lecture room 137)

Chairman: D. Lozovanu

10.15–10.45 **R. Duduchava.** Mellin convolution operators in Bessel potential spaces with admissible meromorphic kernels

10.50–11.20 **Gh. Ciocanu.** Finiteness conditions in algebras

11.25–11.55 **A. V. Arhangel'skii, M. M. Choban.** Weakening of submetrizability and properties of Σ -spaces

Chairman: A. Perjan

12.00–13.30 **Special session of homage to Corresponding member of ASM Israel Gohberg, Professor Chiril Prisăcaru, Academician Constantin Sibirschi**
Presentations by: **V. Glavan, S. Cataranciuc, N. Vulpe**

13.30–14.30 *Lunch*

Section I “Algebra, Geometry and Topology” (Building 2a, room 1)

Chairman: V. Arnautov

14.45–15.00 **V. Popa.** On rings of continuous endomorphisms with no more than two nontrivial closed ideals

15.05–15.20 **A. Lungu, M. Roşca.** The semi-minor and pseudo-minor groups 4-symmetry by the generating groups of category G_{320}

15.25–15.40 **I. S. Gutsul.** On the completion of incomplete non-orientable bitetrahedral hyperbolic 3-manifolds

15.45–16.00 **E. Zamorzaeva.** On isohedral tilings for hyperbolic translation group of genus two

16.05–16.20 **F. Damian, V. S. Makarov, P. V. Makarov.** On regular lens star polytopes

16.25–16.45 *Coffee break*

Chairman: A. Lungu

- 16.45-17.00** L. Solovei. About the types of Bravais lattices in pseudo-Euclidean spaces
17.05-17.20 V. I. Arnautov, G. N. Ermakova. On the lattice of group topologies
17.25-17.40 I. Cucu, M. Rațiu. The implicit bases for chain pseudo-boolean algebras
17.45-18.00 D. Botnaru, O. Cerbu. The description of the semireflexive subcategories using the right product
18.05-18.20 D. Botnaru, A. Țurcanu. The left and right products in the description of the relative torsion theory
18.25-18.40 D. Botnaru, E. Baeș. The cocartesian product of two subcategories
18.45-19.00 A.-M. Patriciu. Singularities of parallel surfaces in 3-dimensional Minkowski space
19.05-19.20 D. Ipate, I. Purcel. About upper semi-continuity of set-valued mappings
19.25-19.40 B. Țarălungă. Retracts and ccs-subgroups of a topological group IG

Section II “Analysis, Differential Equations and Dynamical Systems”

(Building 2a, room 2)

Chairman: M. Popa

- 14.45-15.00** V. A. Gaiko. The bifurcational geometric analysis of polynomial dynamical systems
15.05-15.20 N. Vulpe, J. C. Artes, J. Llibre, D. Schlomiuk. Global configurations of singularities for quadratic differential systems with total finite multiplicity $m_f = 2$
15.25-15.40 A. Șubă, V. Repeșco. Cubic systems with degenerate infinity and six invariant straight lines
15.45-16.00 V. Puțuntică. Phase portraits of quartic differential systems with nine real invariant straight lines along three directions
16.05-16.20 D. Cozma. Centers in cubic differential systems with four invariant straight lines
16.25-16.45 *Coffee break*

Chairman: N. Vulpe

- 16.45-17.00** O. Vacaraș. Cubic systems with a real invariant straight line of maximal integrable multiplicity
17.05-17.20 C. Bujac, N. Vulpe. Configurations of invariant lines of total multiplicity 8 for cubic systems with two real and two complex distinct infinite singularities
17.25-17.40 M. Popa, V. Pricop. A hypothesis related to solving the center-focus problem for the system $s(1,5)$
17.45-18.00 V. Pricop. Generating function and Hilbert series to the center-focus problem for the system $s(1,4)$
18.05-18.20 V. Orlov. Lie generalized theorem on integrating factor and some of its applications
18.25-18.40 Iu. Calin, V. Baltag. The polynomial inverse integrating factors for some classes of cubic bidimensional differential systems with center

- 18.45-19.00 Iu. Calin, S. Ciubotaru.** The center conditions for the bidimensional polynomial systems of differential equations with nonlinearities of the fourth degree

Section III “Applied Mathematics” (Building 2a, room 3)

Chairman: S. Cataranciuc

- 14.45-15.00 D. Lozovanu, S. Pickl.** Algorithms for solving minimum cost flow problem on dynamic networks
- 15.05-15.20 B. Hâncu.** Bayesian game generating by the informational extended strategies of the players
- 15.25-15.40 A. Lazari.** Classical optimal control problem on stochastic systems with a final sequence of states
- 15.45-16.00 V. Lozan, V. Ungureanu.** Stackelberg equilibrium set in bi-matrix mixed-strategy game and method for its determination
- 16.05-16.20 M. Capcelea.** A linear programming approach for solving Markov decision problem with average cost optimization criterion
- 16.25-16.45 Coffee break**

Chairman: B. Hâncu

- 16.45-17.00 M. Cocîrlă.** The dynamic form of the bimatrix informational extended games
- 17.05-17.20 S. Cataranciuc.** Convexity in a complex of abstract cubes
- 17.25-17.40 O. Topală.** On the intersection of maximal sets
- 17.45-18.00 D. Zambîţchi.** Efficient algorithms for solving optimization problems
- 18.05-18.20 A. Sochirca.** Vertex separation in triangle graphs with complementary half-spaces
- 18.25-18.40 S. Cataranciuc, V. Istrati.** m -Convex and ap -convex sets in undirected graphs
- 18.45-19.00 N. Grigoriu.** Minimal stable subgraphs in undirected graphs
- 19.05-19.20 G. Bodnariuc.** An approximate method for calculating the multiple median

Section IV “Computer Science and IT” (Building 2a, room 4)

Chairman: T. Bragaru

- 14.45-15.00 I. Andrieş, V. Arnaut.** Digital processing of the interferograms for submicron accuracy measurements
- 15.05-15.20 I. Andrieş, R. Buzatu.** Tridimensional spectral color model as an one-to-one transformation from RGB color space
- 15.25-15.40 Z. Apanovich.** Using the LOD cloud datasets to enrich the content of a scientific knowledge base
- 15.45-16.00 M. Beldiga, Gh. Căpăţână.** Implementation of decision support in education
- 16.05-16.20 V. Lazu, V. Bobicev.** Question analysis problems in the question answering system

16.25-16.45 *Coffee-break*

Chairman: I. Andrieș

- 16.45-17.00** **T. Bragaru, M. Croitor.** Automating the process of items elaboration
17.05-17.20 **T. Bragaru, M. Croitor.** On developing "Objectives" extension for Moodle
17.25-17.40 **R. Buzatu, D. Iurco.** Knowledge interchange between semantic technologies in building of intelligent interfaces
17.45-18.00 **I. Țițchiev.** Parallel computing by means of workflow Petri nets
18.05-18.20 **N. Objelean.** The experimental voice recognition system
18.25-18.40 **N. Objelean, V. Arnaut.** Using language knowledge for rapidly development speech recognition system

Section V "Didactics" (Building 2a, room 8)

Chairman: V. Bordan

- 14.45-15.00** **I. Valuță.** Asupra unor probleme actuale ale sistemului de învățământ din Republica Moldova
15.05-15.20 **I. Achiri.** Curriculumul școlar la matematică: aspecte de dezvoltare
15.25-15.40 **C. L. Cozoș.** O nouă viziune asupra organizării modulare a programei de matematică în învățământul preuniversitar
15.45-16.00 **A. Soloi, A. Beteringhe, A. Halilovic.** Methods, techniques and strategies in higher mathematics education
16.05-16.20 **A. Poștaru, O. Benderschi.** Formarea intuiției probabiliste la elevi

16.25-16.45 *Coffee break*

Chairman: I. Achiri

- 16.45-17.00** **G. Rusu.** Criterii de evaluare a unui curs on-line
17.05-17.20 **L. Popov, L. Pșenicinfi.** Crearea și actualizarea testelor cu ajutorul programului "Constructorul de teste" al firmei Keepsoft
17.25-17.40 **A. Dodon.** Rolul metodelor activ-participative în formarea competențelor specifice la matematică în colegiu
17.45-18.00 **A. Feghiu.** Valorificarea softurilor educaționale în cadrul lecțiilor de matematică
18.05-18.20 **L. Hanganu.** Aspecte didactice ale aplicării metodelor interactive în cadrul orelor de matematică din perspectiva centrării pe elev
18.25-18.40 **I. Țițchiev.** Demersul pedagogic în formarea competențelor la disciplina Informatică
18.45-19.00 **N. Bleandură.** The design of didactic situations in digital media

Tuesday, August 20, 2013

Plenary session (Main building, lecture room 137)

Chairman: R. Duduchava

- 09.00-09.30 D. Lozovanu.** The game-theoretical approach to Markov decision processes and stochastic positional games
- 09.35-10.05 M. Heilmann.** Some results for Szász-Mirakjan type operators
- 10.10-10.40 V. Berinde, M. Păcurar.** Fixed point theorems for single-valued non-self almost contractions satisfying property (M)
- 10.55-11.15** *Coffee break*

Section I “Algebra, Geometry and Topology” (Building 2a, room 1)

Chairman: V. A. Shcherbacov

- 11.15-11.30 A. I. Kashu.** On the relation between the closure operators and preradicals in modules
- 11.35-11.50 M. M. Choban, P. S. Kenderov, J. P. Revalski.** Variational principles and properties of spaces
- 11.55-12.10 F. M. Sokhatsky.** On isotopy-isomorphy problem
- 12.15-12.30 L. I. Calmuțchi, M. M. Choban.** Nearness and compactifications
- 12.35-12.50 I. Bunu.** On the lattice of pretorsions with six elements
- 12.55-13.10 G. Belyavskaya.** On identities characterizing quasigroups isotopic to abelian groups
- 13.15-13.30 V. Ursu.** Algebraic characteristic of quasivarieties of loops
- 13.30-14.30** *Lunch*

Chairman: A. I. Kashu

- 14.45-15.00 V. A. Shcherbacov.** Parastroph orthogonality of linear and alinear quasigroups
- 15.05-15.20 A. Covalschi, V. Ursu.** Quasiidentities of free nilpotent A -loops and of nilpotent Moufang loops
- 15.25-15.40 P. Sârbu, I. Grecu.** Commutants of middle Bol loops
- 15.45-16.00 I. Fryz.** Generalized notion of orthogonality
- 16.05-16.20 H. Krainichuk.** About minimal nontrivial quasigroup identities
- 16.25-16.35** *Coffee break*

Tuesday, August 20, 2013

Chairman: F. M. Sokhatsky

- 16.35-16.50 P. Sârbu, D. Ceban.** π -Quasigroups of type T_1
16.55-17.10 D. I. Pushkashu. Groupoids with Schroder identities
17.15-17.30 D. Pavel. On subspaces of the spaces of pseudo-quasimetrics
17.35-17.50 S. Cruglea. On LCA groups with semi-simple Zorn rings of continuous endomorphisms
17.55-18.10 Şt. Alexei. On some identities

Section II “Analysis, Differential Equations and Dynamical Systems”

(Building 2a, room 2)

Chairman: M. Heilmann

- 11.15-11.30 H. Gonska.** Chebyshev-Gruss-type inequalities via discrete oscillations
11.35-11.50 I. Burdujan. Commutative algebras and polynomial differential systems
11.55-12.10 N. Jitaraşu. On the nonlocal parabolic problem of bilocal boundary problem type
12.15-12.30 A. Perjan, G. Rusu. Singularly perturbed Cauchy problem for abstract linear second order differential equation with two small parameters
12.35-12.50 D. Cheban. Belitskii-Lyubich conjecture for C -analytical dynamical systems
12.55-13.10 V. Glavan. On limit sets in affine Iterated Function Systems
13.15-13.30 V. Guţu, V. Melnic. Fixed and periodic points of perturbed functions on real axis
13.30-14.30 Lunch

Chairman: I. Burdujan

- 14.45-15.00 M. A. Petric.** Fixed point principles for multi-valued cyclical operators
15.05-15.20 V. S. Dryuma. Algebraic ODE's to the first order differential equations
15.25-15.40 A. Soloi. Mathematical aspects in biological systems with behavioral adaptation
15.45-16.00 A. Croitoru, A. Gavriluţ. Considering Gould integrable functions
16.05-16.20 S.-O. Corduneanu. Properties of the space of almost periodic measures
16.25-16.35 Coffee break

Chairman: A. Perjan

- 16.35-16.50 V. Neagu.** On the spectrum of singular integral operators in L_p spaces with weight
16.55-17.10 G. Vornicescu, I. Pancenco. Riemann boundary-value problem for generalized functions
17.15-17.30 D. Bîclea. On some noetherian conditions for system of singular integral equations

Section III “Applied Mathematics” (Building 2a, room 3)

Chairman: V. Pațiu

- 11.15-11.30 Gh. Mishkoy, L. Mitev, E. Luchian.** On priority discipline DD with semi-Markov switching
- 11.35-11.50 A. Poștaru, N. Prodan, O. Benderschi.** On some applications of random response method
- 11.55-12.10 A. Corlat.** Reliability analysis of semi-markovian systems
- 12.15-12.30 A. Godonoaga, M. Gurghis.** A dynamic model for bank portfolio management
- 12.35-12.50 Iu. Damian, A. Mamonova.** Queuing system type $[SM|M|1|\infty]^N$ with semi-Markov flow in diffusion approximation schemes
- 12.55-13.10 E. Naval.** Agricultural sector development modeling under random shocks
- 13.15-13.30 L. Novac.** On a dynamic model for the problem of currency exchange

13.30-14.30 Lunch

Chairman: A. Poștaru

- 14.45-15.00 V. Pațiu, G. Rîbacova.** Parallel algorithm for calculating the parameters of semiconductor devices
- 15.05-15.20 A. Albu, V. Zubov.** Application of the fast automatic differentiation technique to the optimal control of the welding process
- 15.25-15.40 A. Tkacenko.** The interval method for solving fuzzy multi-criteria transportation model
- 15.45-16.00 B. Morcov.** One of the forms of mathematical model of space craft motion with solar sail
- 16.05-16.20 C. Damian.** Studies regarding the dependency of viscosity on temperature and concentration

16.25-16.35 Coffee break

Chairman: G. Rîbacova

- 16.35-16.50 M. Dumitrache, C. Gheldiu.** High frequency waves and the equation of dispersion
- 16.55-17.10 I. Secieru.** Weighted approximate scheme for fractional diffusion equation with two space variables
- 17.15-17.30 I. Verlan.** A mixed cubic-quartic scheme of C^2 interpolation
- 17.35-17.50 A. Baractari, A. Tuceac.** Algorithms for solving general models for oligopolistic situations
- 17.55-18.10 A. Mukhtar, C. L. Cozoș.** Mathematical models in public international law

Section IV “Computer Science and IT” (Building 2a, room 4)

Chairman: Gh. Căpățână

- 11.15-11.30 A. Popov, M. Butnaru, A. Căpățână, Gh. Căpățână.** Intelligent support system for diagnosis and treatment assistance of mental and behavioral disorders in epilepsy
- 11.35-11.50 A. Profir, A. Prepelita.** Development of myocardial electrical activity model
- 11.55-12.10 A. Profir, L. Prepelita, M. Panasel.** Thyroid activity regulation modeling by Petri nets
- 12.15-12.30 A. Lefterev, A. Fedoseev, V. Khodakivskiy, D. Surmay.** Modified object-oriented approach for management accounting tasks
- 12.35-12.50 V. Maxim, A. Popescu.** Developing a question-answering system
- 12.55-13.10 L. Nigrețcaia-Croitor, M. Croitor.** An example of domain engineering for business planning domain
- 13.15-13.30 L. Nigrețcaia-Croitor, N. Pleșca.** Business planning domain analysis
- 13.30-14.30 Lunch**

Chairman: V. Arnaut

- 14.45-15.00 N. Pleșca.** Efficiency of business plan development by using software
- 15.05-15.20 E. Calmîș.** Expanding the software and physical layers of the USM HPC Cluster system infrastructure
- 15.25-15.40 V. Gîsca.** A top-down parsing with attribute grammars
- 15.45-16.00 Gh. Latul.** Learning material presentation in computer assisted courses interpretation with XML aid

Section V “Didactics” (Building 2a, room 8)

Chairman: I. Valuță

- 11.15-11.30 E. Ursu, V. Ursu.** Un concept asupra derivabilității funcțiilor de variabilă hipercomplexă
- 11.35-11.50 V. Bordan, V. Bordan.** Rezolvarea ecuațiilor iraționale cu ajutorul rezolventei
- 11.55-12.10 D. Afanas.** Tehnologiile moderne în predarea-învățarea-evaluarea elementelor de analiză matematică în liceu
- 12.15-12.30 M. Teleuca, L. Sali.** Ghidarea elevilor dotați în procesul de generalizare a problemelor
- 12.35-12.50 P. Macari, L. Macari.** Funcții generatoare și identități combinatorice
- 12.55-13.10 C. Damian.** Motivarea studenților din domeniul ingineriei alimentare pentru învățarea matematicii prin intermediul problemelor de specialitate
- 13.15-13.30 M. Botnarenco.** Motivarea elevilor din colegii pentru studierea matematicii prin intermediul problemelor din domeniile de specialitate
- 13.30-14.30 Lunch**

Tuesday, August 20, 2013

Chairman: D. Afanas

- 14.45-15.00 S. Gîncu.** Modalități de structurare a conținutului cursului universitar “Programarea orientată pe obiecte “ în perspectiva învățământului axat pe competențe
- 15.05-15.20 V. Covalachi.** Modelarea matematică: noi abordări didactice în contextul implementării tehnologiilor computaționale
- 15.25-15.40 M. Pavel.** Bifuncționalitatea TIC: obiect de cercetare și instrument de predare
- 15.45-16.00 C. Chiciuc.** Blocajele creativității
- 18.30-21.00 Official Diner (MSU, Café)**

Internet room – Building 2a, room

**Conference time-table
Monday, August 19, 2013**

	Section 1 AGT 2a, room 1	Section 2 ADE 2a, room 2	Section 3 AM 2a, room 3	Section 4 ITI 2a, room 4	Section 5 D 2a, room 8
08.00-9.45	<i>Registration</i> (MB, room 137, hall)				
10.00-10.10	<i>Opening ceremony</i> (MB, room 137)				
10.15-10.45	R. Duduchava (plenary talk, MB, room 137)				
10.50-11.20	Gh. Ciocanu (plenary talk, MB, room 137)				
11.25-11.55	A. V. Arhangel'skii, M. M. Choban (plenary talk, MB, room 137)				
12.00-13.30	<i>Special session of homage to Corresponding member of ASM Israel Gohberg, Professor Chiril Prisăcaru, Academician Constantin Sibirschi</i> Presentations: V. Glavan, S. Cataranciuc, N. Vulpe (MB, room 137)				
13.00-14.30	<i>Lunch</i>				
14.45-15.00	V. Popa	V. A. Gaiko	D. Lozovanu +	I. Andrieș +	I. Valuță
15.05-15.20	A. Lungu +	N. Vulpe +	B. Hâncu	I. Andrieș +	I. Achiri
15.25-15.40	I. Gutsul	A. Șubă +	A. Lazari	Z. Apanovich	C. Cozoș
15.45-16.00	E. Zamorzaeva	V. Puțunică	V. Lozan +	M. Beldiga +	A. Soloi +
16.05-16.20	F. Damian +	D. Cozma	M. Capcelea	V. Lazu +	A. Poștaru +

Time-table

16.25-16.45	<i>Coffee break</i>				
16.45-17.00	L. Solovei	O. Vacaraș	M. Cocîrlă	T. Bragaru +	G. Rusu
17.05-17.20	V. Arnautov +	C. Bujac +	S. Cataranciuc	T. Bragaru +	L. Popov +
17.25-17.40	I. Cucu +	M. Popa +	O. Topală	R. Buzatu +	A. Dodon
17.45-18.00	D.Botnaru +	V. Pricop	D. Zambîțchi	I. Țițchiev	A. Feghiu
18.05-18.20	D.Botnaru +	V. Orlov	A. Sochirca	N. Objelean	L. Hanganu
18.25-18.40	D.Botnaru +	Iu. Calin +	S. Cataranciuc +	N. Objelean +	I. Țițchiev
18.45-19.00	A.-M. Patriciu	Iu. Calin +	N. Grigoriu		N. Bleandură
19.05-19.20	D. Ipate +		G. Bodnariuc		
19.25-19.40	B. Țarălunță				

Tuesday, August 20, 2013

	Section 1 AGT 2a, room 1	Section 2 ADE 2a, room 2	Section 3 AM 2a, room 3	Section 4 ITI 2a, room 4	Section 5 D 2a, room 8
09.00-09.30	D. Lozovanu (plenary talk, MB, room 137)				
09.35-10.05	M. Heilmann (plenary talk, MB, room 137)				
10.10-10.40	V. Berinde, M. Păcurar (plenary talk, MB, room 137)				
10.45-11.15	<i>Coffee break</i>				
11.15-11.30	A. Kashu	H. Gonska	Gh. Mishkoy +	A. Popov +	E. Ursu +
11.35-11.50	M. Choban +	I. Burdujan	A. Poștaru +	A. Profir +	V. Bordan +
11.55-12.10	F. Sokhatsky	N. Jitarașu	A. Corlat	A. Profir +	D. Afanas
12.15-12.30	L. Calmuțchi +	A. Perjan +	A. Godonoaga +	A. Lefterev +	M. Teleuca +
12.35-12.50	I. Bunu	D. Cheban	Iu. Damian +	V. Maxim +	P. Macari +
12.55-13.10	G. Belyavskaya	V. Glavan	E. Naval	L. Nigrețcaia- Croitor +	C. Damian
13.15-13.30	V. Ursu	V. Guțu +	L. Novac	L. Nigrețcaia- Croitor +	M. Botnarenco

Time-table

13.30-14.30	<i>Lunch</i>				
14.45-15.00	V. Shcherbacov	M. Petric	V. Pațiuț +	N. Pleșca	S. Gîncu
15.05-15.20	A. Covalschi +	V. Dryuma	A. Albu +	E. Calmîș	V. Covalschi
15.25-15.40	P. Sârbu +	A. Soloi	A. Tkacenko	V. Gîsca	M. Pavel
15.45-16.00	I. Friz	A. Croitoru +	B. Morcov	Gh. Latul	C. Chiciuc
16.05-16.20	H. Krainiciuk	S.-O. Corduneanu	C. Damian		
16.25-16.35	<i>Coffee break</i>				
16.35-16.50	P. Sârbu +	V. Neagu	M. Dumitrache +		
16.55-17.10	D. Pushkashu	G. Vornicescu +	E. Naval		
17.15-17.30	D. Pavel	D. Bîclea	I. Verlan		
17.35-17.50	S. Cruglea		A. Baractari +		
17.55-18.10	Ș. Alexei		A. Mukhtar +		