

The International Conference of Differential Geometry and Dynamical Systems

(DGDS-2013)

10-13 October 2013, University Politehnica of Bucharest, Romania

Conference program * [16.10.2013]

THURSDAY, 10 October 2013 * First Conference Day

Registration * h. 9:00-16:00 * Registration desk: room R 412 in Rectorate building

THURSDAY, 10 October 2013 (afternoon session)

		Room AN 010	15:00-15:40
	Opening ceremony Commemorative addresses: * In memory of Professor Grigorios Tsagas (by Vladimir Balan, Panaiyotis Stavrinou and Constantin Udriște) * In memory of Professor Mauro Francaviglia (by Vincenzo Ciancio)		40'
<i>COFFEE BREAK - 20'</i>			
	Chairman: Constantin Udriște	Room AN 010	16:00-18:10
1	Plenary talk: Generalized Geometry and double field theory; Izu Vaisman		30'+5'
2	Plenary talk: The Principle of Equivalence and how geodesics may determine the geometry of manifolds; Graham Hall		30'+5'
3	Plenary talk: Jets of solutions of variational PDEs: fundamental symplectic structures and basic properties; Jerzy Kijowski		55'+5'
Welcome party (banquet) at Hotel "Yesterday" [20:00-22:00]			

FRIDAY, 11 October 2013 (morning session)

	Chairmen: Yoshio Matsuyama and Oscar Jesus Garay Bengoechea	Room BN s05	8:00-10:00
1.	Extremals of bending-like energies: a visual tour; Oscar Jesus Garay Bengoechea		25' +5'
2.	On hypersurfaces the Ricci tensor satisfying certain conditions; Yoshio Matsuyama		25' +5'
3.	On some classes of foliations; Paul Popescu and Marcela Popescu		25' +5'
4.	The decay of isotropic turbulence preserving a general type of self similarity; Himadri Pai Majumdar		25' +5'

*COFFEE BREAK - 40'***Visit to the Central Military Museum****(approx. 3 EU = 13 Lei, on demand, approx. 3:00 hours; departure = 11:00, from AN first-floor-cafe)****Lunch break****FRIDAY, 11 October 2013 (afternoon session)**

	Chairs: Vincenzo Ciancio and Iulia Elena Hiričă	Section A - Room BN s05	16:00-17:00
1.	On some geometric flows; Iulia Elena Hiričă		15' +5'
2.	A relativistic model for viscoelastic media with internal thermodynamical variables; Vincenzo Ciancio		15' +5'
3.	A class of solutions for the hybrid kinetic model in the tumor-immune system competition; Armando Ciancio, Carlo Cattani		15' +5'

	Chairmen: Adrian Constantinescu and Marcel Roman	Section B - Room BN 134	16:00-17:10
1.	Tensor products of nonnegative linear relations and factorizations; Marcel Roman, Adrian Sandovici		15' +5'
2.	Genome of Descartes folium; Adrian Constantinescu, Constantin Udriște, Steluța Pricopie		25' +5'
3.	Harmonic functions on generalized Poincaré manifolds; Gabriel Bercu and Mircea Crâșmăreanu		15' +5'

COFFEE BREAK - 30'

	Chairmen: Armando Ciancio and Cristian Ida	Section A - Room BN s05	17:30-18:50
1.	Foliations compatible with Hamiltonians; Paul Popescu and Cristian Ida		15' +5'
2.	On a metric holomorphic connections in complex Lie groups; Cristian Ida and Alexandru Ionescu		15' +5'
3.	Big Bang singularity in the Friedmann-Lemaitre-Robertson-Walker spacetime; Cristi Stoica		15' +5'
4.	Dual structures on Lie algebroids; Liviu Popescu		15' +5'

	Chairs: Constantin Udriște and Savin Treanță	Section B - Room BN 134	17:30-18:30
1.	Geometric PDEs and control problems; Savin Treanță		15' +5'
2.	Optimal control problems on higher order jet bundles; Savin Treanță and Constantin Udriște		15' +5'
3.	An example of fermionic stochastic calculus; Cristina Șerbănescu		15' +5'

Scientific Film: *Multidimensional time* (IRI-HSGP - Moscow) * room BN s05**[19:00-20:40]**

SATURDAY, 12 October 2013 (morning session)

Chairs: Mirjana Djoric and Sharief Deshmukh		Room BN s05	8:00-10:50
1.	A differential equation on Trans-Sasakian manifolds; Sharief Deshmukh		25' +5'
2.	CR submanifolds in complex space forms; Mirjana Djoric, Masafumi Okumura		40' +5'
3.	On the group of isometries of the space; Kostadin Trenevski		25' +5'
<i>COFFEE BREAK - 40'</i>			
Chairs: Olga Belova and Vladimir Gerdjikov		Room BN s05	11:00-13:30
1.	Integrable equations with Z_n - and D_n -symmetries and Riemann-Hilbert problems; Vladimir Gerdjikov		25' +5'
2.	Parallel displacements of directions on the Grassmann-like manifold of centered planes; Olga Belova		25' +5'
3.	Measures of non-compactness and their applications; Eberhard Malkowski		25' +5'
4.	Bicomplex structures on Walker manifolds; Cornelia-Livia Bejan		25' +5'
5.	On the duality between mean-risk models and absolute portfolios; Marius Rădulescu, Sorin Rădulescu, Zbăganu Gheorghiuță and Constanța Zoie Rădulescu		25' +5'
Lunch break [13:30-15:30]			

SATURDAY, 12 October 2013 (afternoon session)

Chairmen: Eberhard Malkowski and Virgil Obădeanu		Section A - Room BN s05	15:30-17:00
1.	Line graphics for visualization of surfaces; Vesna Velickovic		25' +5'
2.	Some classes of R-complex Hermitian Finsler spaces; Gabriela Câmpean and Nicoleta Aldea		15' +5'
3.	On the second order differential dynamical systems; Virgil Obădeanu and Monica Ciobanu		15' +5'
4.	Mecanique classique sur des espaces structures (I) (cinematique sur des espaces de Riemann); Virgil Obădeanu		15' +5'
Chairman: Oltin Dogaru		Section B - Room BN 134	15:30-16:10
1.	Necessary and sufficient conditions of optimality for a family of curves; Mădălina Constantinescu, Oltin Dogaru		15' +5'
2.	Some classification of inverse surfaces in Minkowski 3-space; Muhittin Evren Aydin and Mahmut Ergut		15' +5'
<i>COFFEE BREAK - 20'</i>			
Chairmen: Kostadin Trenevski		Section A - Room BN s05	17:20-18:40
1.	Open-end-multitime optimization problems; Constantin Udriște and Ionel Tevy		15' +5'
2.	Multi-temporal controllability for homogeneous linear systems of PDEs; Cristian Ghiu, Constantin Udriște		15' +5'
3.	On soliton solutions of Titeica equation; Vladimir Gerdjikov, Nicoleta-Corina Babalić		15' +5'
4.	Codazzi algebras associated to the pair of the Levi-Civita connections (∇, ∇') on the tangent space of a fibered manifold; Valentin Gabriel Cristea		15' +5'
Chairs: Valeriu Prepelită and Ariana Pitea		Section B - Room BN 134	17:20-18:25
1.	Acausal discrete-time 2D systems; Tiberiu Vasilache, Valeriu Prepelită and Mona Doroftei		20' +5'
2.	Computing cofactors for perturbation tri-band matrices, Marta Grosu		15' +5'
3.	New aspects of generalized Laguerre functions in statistics; Corina Grosu		15' +5'

General Assembly of Balkan Society of Geometers * Room BN s05 * [18:50-19:15]

SATURDAY 12 October 2013 * h. 18:00-18:50 * POSTER Session

1.	The natural transformations between r -tangent and r -cotangent bundles over Riemannian manifolds; Jan Kurek and Wlodzimierz Mikulski	Poster
2.	Some dynamical aspects on the Lie group $SO(4)$; Camelia Pop and Camelia Petrișor	Poster
3.	Geometric methods for the study of dynamical systems. symmetries and conservation laws, Florian Munteanu	Poster
4.	Mathematical modeling of noise mapping at wind turbine farms; Janina Mihaela Mihailă, Cristian Bigan and Valentin Panduru	Poster
5.	Lie brackets and horizontal vectors; Katerina Polyakova	Poster
6.	About holonomic and semiholonomic spaces of the Cartan projective connection; Yury Shevchenko	Poster
7.	Invariants of smooth bundles; Viktor Kuzakon and A.M. Shelekhov	Poster
8.	The classification of det-induced Finsler-Mueller structures; Vladimir Balan, Victor Red'kov and Alexandru Oană	Poster
9.	On Post-Gluskin-Hosszu Theorem; Aleksandr Gal'mak, Vladimir Balan and Genady Vorobiev	Poster

SUNDAY, 13 October 2013 (morning session)

	Chairmen: Miroslav Doupovec and Octav Olteanu	Room BN s05	8:00-10:30
1.	On Markov moment problem and Mazur-Orlicz theorem; Octav Olteanu		25' +5'
2.	Generalized convexity around degenerate extremum points; Gabriel Teodor Pripoae		25' +5'
3.	Frobenius Weil bundles and the natural equivalence between functors composed from the Weil and cotangent functors; Miroslav Doupovec and Miroslav Kures		25' +5'
4.	Noncommutative Lagrange-Finsler evolution and modern Gravity; Sergiu Văcaru		25' +5'
5.	Systolic simplicial complexes are collapsible; Ioana-Claudia Lazăr		25' +5'

COFFEE BREAK

	Chairmen: Gabriel Pripoae and Constantin Târcolea	Room BN s05	10:45-12:45
1.	Loss function and Taguchi theory; Constantin Târcolea, Adrian Paris and Dana Sylvan		25' +5'
2.	Weak and strong multitime maximum principles; Constantin Udriște		25' +5'
3.	Comparing variants of single-time stochastic maximum principle; Constantin Udriște		25' +5'
4.	Waves, gravity and entropy - new mathematical formulations for modern technology; Constantin Udriște, Florin Munteanu and Dorel Zugrăvescu		25' +5'

Conference closing ceremony [h.12:50 * Room BN s05]