

The International Conference of Differential Geometry and Dynamical Systems

(DGDS-2009)

October 8-11, 2009, University Politehnica of Bucharest, Romania

Effective conference programme

Registration		
THURSDAY, October 8, 2009 [AM] * h. 9:00-13:00 * Room R412 (Rectorate building)		
THURSDAY, October 8, 2009 [PM]		
	OFFICIAL OPENING CEREMONY - SENATE ROOM (UPB Rectorate Building, second floor)	Thursday 15:00-15:40
<i>COFFEE BREAK (BN Hall)</i>		
	Chairmen: D. Saunders and C. Udriște	Section A Room BN 113, 16:00-17:30
1.	Second order models of tumor-immune system competition with therapy, C. Cattani, A. Ciancio	15' +5'
2.	Stability in robot controlled with biological cells, Nicola Barbalace, Armando Ciancio	15' +5'
3.	Mechanical model for relaxation phenomena in viscoelastic media of order one, Vincenzo Ciancio, Francesco Farsaci, Patrizia Rogolino	15' +5'
4.	On a class of subalgebras and some canonical chains of ideals: from Geometry to Algebra.II (dedicated to Alexander Grothendieck's eighties), Adrian Constantinescu	25' +5'
	Chairman: V. Prepelită	Section B Room BN 134, 16:00-17:30
1.	Stochastic generalized fractional HP equations and applications, Ion Doru Albu, Mihaela Neamtu, Dumitru Opris	25' +5'
2.	Semiseparable kernels of 2D generalized hybrid systems, Valeriu Prepelită	25' +5'
3.	Note on a function satisfying the Palais-Smale condition, Grațiana Cicortaș	25' +5'
<i>BREAK</i>		
	Chairman: I. D. Albu	Section A Room BN 113, 18:00-19:30
1.	Lines of curvature on quadratic surfaces, Eberhard Malkowsky, Vesna Velickovic	25' +5'
2.	Efficiency and duality for vector multi-time control problems with mixed constraints, Ștefan Mititelu, Mihai Postolache	15' +5'
3.	On the geometry of (2,0)-jets bundle, Violeta Zaluțchi	15' +5'
4.	Extensions on twisted crossed products of completely positive invariant projective u-covariant multi-linear maps, Tania-Luminița Costache	15' +5'
	Chairman: A. Constantinescu	Section B Room BN 134, 18:00-19:40
1.	Mathematical modeling of forward kinematics in parallel robots, Ovidiu Antonescu, Păun Antonescu, Viviana Filip	15' +5'
2.	Geometrical structures associated to implicit first order dynamical systems with holonomic constraints, Virgil Obădeanu, Monica Ciobanu	15' +5'
3.	Von Neumann analysis of linearized discrete Tzitzeica PDE, Corina Cipu, Constantin Udriște, Vasile Arsinte	15' +5'
4.	Nonholonomic Gibbs-Pfaff hypersurface, Cristina Stamin, Constantin Udriște	15' +5'
5.	Lagrange-Hamilton conjugations, Petre Stavre and Adrian Lupu	15' +5'
	Festive Dinner (Banquet) [20:00-22:00]	

FRIDAY, October 9, 2009 [A.M.]

	Chairmen: D. Krupka and T. Mestdag	Room BN 113 9:00-11:00
1.	General Relativity at the turn of the third millennium, Mauro Francaviglia	40' +5'
2.	Invariance of g -natural metrics on tangent sphere bundles and linear frame bundles, O.Kowalski, M. Sekizawa	25' +5'
3.	Homogeneous geodesics in homogeneous affine manifolds and remarkable invariants of $SL(2, \mathbf{R})$, Z. Dusek, O. Kowalski	40' +5'
<i>COFFEE BREAK</i>		
	Chairmen: O. Kowalski and M. Francaviglia	Room BN 113 11:15-13:15
1.	Anholonomic frames for nonholonomic and vakonomic systems, Tom Mestdag	25' +5'
2.	Higher order Grassmann fibrations and the calculus of variations, D. Krupka and M. Krupka	25' +5'
3.	Helmholtz conditions and their generalizations, O. Krupkova and R. Malikova	25' +5'
4.	Indexing mathematics - the past, the present and the future of the Mathematics Subject Classification, Bernd Wegner	25' +5'
	Lunch break [13:15-15:00]	

POSTERS – SATURDAY, October 10, 2009, h.15:00-19:00

1.	A comparative study of active and semi-active control of building seismic response, Iuliana Popescu, Tudor Siretenu, Ana Maria Mitu	Poster
2.	Fibrés tangents et transformation des mouvements, Maida Rahula	Poster
3.	Quadratic Hamilton-Poisson systems on the 13th Lie algebra from Bianchi's classification, Aron Anania, Camelia Pop	Poster
4.	Soliton solutions of the Sine-Gordon equation, Laura Gabriela Matei	Poster
5.	Some remarks on the Earth's ellipsoid of inertia, Alina Daniela Vilcu	Poster
6.	The role of idempotents in the study of near-rings, Anghel Panait, Camelia Ciobanu, Mirela Stefanescu	Poster
7.	Geometry and interaction of nonholonomic thermodynamic systems, Cristina Ștefania Stamin	Poster
8.	Sur les formules de type Gauss-Bonnet pour des espaces Riemann bidimensionels compacts et orientables, Janina Mihaela Mihailă	Poster
9.	Infinitely many solutions for the Dirichlet problem on the Sierpinski gasket, Brigitte E. Breckner, Csaba Varga	Poster
10.	Sufficient efficiency conditions for a minimizing fractional program, Ariana Pitea, Constantin Udriște	Poster
11.	Harmonic maps on Riemannian manifolds, Livia Tănase	Poster
12.	3f-structures and $(k-\nu)$ nullity condition, Adrian Ionescu	Poster
13.	2D-Hessian structures with the same connection, Gabriel Bercu, Claudiu Corcodel, Mihai Postolache	Poster

FRIDAY, October 9, 2009 [P.M.]

	Chairmen: A. Ciancio and V. Balan	Section A Room BN 113 15:00-17:00
1.	Constant Jacobi osculating rank of a g.o. manifold, Teresa Arias-Marco, A. M. Naveira	25' +5'
2.	Lagrangian and Hamiltonian formalism on Lie algebroids, Liviu Popescu	25' +5'
3.	Harmonic theory for elliptic complexes, Mircea Craioveanu, Camelia-Ionela Petrișor, Filip Fiat	25' +5'
4.	Global inversion theorems and geometry, Marius Rădulescu, Sorin Rădulescu	25' +5'
	Chairmen: V. Ciancio and C. Târcolea	Section B Room BN 134 15:00-17:00
1.	On entropy production in relativistic thermodynamics, Vincenzo Ciancio, Francesco Farsaci, Patrizia Rogolino	35' +5'
2.	Black holes nonholonomic thermodynamics, Constantin Udriște, Vincenzo Ciancio, Francesco Farsaci	35' +5'
3.	Multitime Dynamic programming for multiple integral actions, Constantin Udriște, Ionel Tevy	35' +5'
<i>BREAK</i>		
	Chairman: L. Popescu	Section A Room BN 113 17:20-19:00
1.	Nonholonomic geometry of economic systems, C. Udriște, M. Ferrara, D. Zugrăvescu, F. Munteanu	15' +5'
2.	Equivalence of multitime optimal control problems, Constantin Udriște	15' +5'
3.	Elementary work, Newton Law and Euler-Lagrange equations, Constantin Udriște	15' +5'
4.	Euler-Lagrange prolongations of Maxwell PDEs, Constantin Udriște, Armando Ciancio	15' +5'
5.	The heat equation, the heat kernel and Green function for the generalized Hermite operator. The abstract Cauchy problem (ACP) for the abstract Hermite operator, Catană Viorel	15' +5'
	Chairmen: P. Rogolino and M. Rădulescu	Section B Room BN 134 17:20-19:00
1.	Eulerian distributions applied in the Reliability, C. Târcolea, A.Paris, C. Andreescu	15' +5'
2.	Uni- and multivariate loss functions and the Taguchi's Theory, M. Demetrescu, A. Paris, C. Târcolea	15' +5'
3.	Quadratic dynamical systems and their applications, Ilie Burdujan	15' +5'
4.	Rheonomic KCC invariants induced by special Finsler metrics, Vladimir Balan, Rodica-Ileana Nicola	15' +5'
5.	Finslerian structures and multilinear spectral analysis, Vladimir Balan	15' +5'
	Film: The Anisotropic Universe * [19:15-21:15] Scientific movie distinguished with the prize "The Golden Feather" - 2009 [RI-HSGP - Russian Federation]	BN 113

SATURDAY, October 10, 2009 [A.M.]

	Chairmen: D. Pavlov and S. Siparov	Room BN 113 9:00-10:30
1.	Noncommuting variations in Lagrangian Field Theory, dissipation and the internal time, Serge Preston	25' +5'
2.	Horizontal forms on jet bundles, David Saunders	25' +5'
3.	On submanifolds with the Ricci tensor or with the second fundamental form satisfying certain conditions, Yoshio Matsuyama	25' +5'
<i>COFFEE BREAK</i>		
	Chairmen: S. Preston and D. Saunders	Room BN 113 10:45-12:45
1.	Symmetries and metric invariants, Dmitry Pavlov	25' +5'
2.	Philosophical and mathematical foundations of Finsler extensions of Relativity Theory, Dmitry Pavlov	25' +5'
3.	About Julia sets on double numbers plane, D.G. Pavlov, M.S. Panchelyuga, V.A. Panchelyuga	25' +5'
4.	Anisotropic metric for Relativity Theory- new ways to interpret classical GRT tests, Sergey Siparov	25' +5'
	Lunch break [13:15-15:00]	

SATURDAY, October 10, 2009 [P.M.]

	Chairmen: O. Malouf and G.E. Vilcu	Section A Room BN 113 15:00-16:30
1.	(α, β) - metrics with reversible geodesics, Ioana Monica Maşca, Vasile Sorin Sabău, Hideo Shimada	25' +5'
2.	Visualisation of the moduli of analytic functions, Eberhard Malkowsky	25' +5'
3.	Singular flat metrics on surfaces, Ousama Malouf	25' +5'
	Chairmen: A. Bhattacharyya	Section B Room BN 134 15:00-16:30
1.	An optimal control problem on the special Euclidean group SE(3,R), Mircea Craioveanu, Camelia Pop, Anania Aron, Camelia Petrişor	25' +5'
2.	Light dragging phenomenon and expanding wormholes, Hristu Culeţu	25' +5'
3.	Ricci flow and Ricci soliton on eta-Einstein manifold, Arindam Bhattacharyya and Tapan De	25' +5'
<i>BREAK</i>		
	Chairmen: E. Malkowsky and Y. Matsuyama	Section A Room BN 113 16:40-18:10
1.	Other classes of tangent bundles with general natural almost anti-Hermitian structures, Simona-Luiza Druţă	25' +5'
2.	A new approach to electromagnetism in anisotropic spaces, Nicoleta Voicu-Brînzei, Sergey Siparov	25' +5'
3.	Paraquaternionic structures and their counterpart in odd dimension, Gabriel Eduard Vilcu	25' +5'
	Farewell Party at Restaurant Terasa Doamnei (Trei Ursuleti) * [19:00-22:00]	

SUNDAY, October 11, 2009 [A.M.]

	Chairmen: Panagiotis Stavrinos	Room BN 113 9:00-10:30
1.	A "Riemannian" approach to the Chern connection, Jaime Muñoz Masqué, Eugenia Rosado María	25' +5'
2.	Some aspects on the generalized gravitational and cosmological models, Panagiotis Stavrinos	25' +5'
3.	Large deviation estimates in semi-group theory, Remi Leandre	25' +5'
<i>COFFEE</i>		

SUNDAY, October 11, 2009 [P.M.]

	Chairmen: P. Popescu and M. Olteanu	Section A Room BN 113 15:00-17:20
1.	Models of endotoxin tolerance, Paul Flondor, Mircea Olteanu, Cătălin Vasilescu	15' +5'
2.	Elastic stresses around aligned lamellar voids, Romeo Bercia	15' +5'
3.	Controlled linear PDEs systems, Cristian Ghiu, Constantin Udriște	15' +5'
4.	The second-order spheres and projective bundles, Marcela Popescu, Paul Popescu	15' +5'
	Chairmen: O. Olteanu and O. Martin	Section B Room BN 134 15:00-17:20
1.	Solving functional equations and related applications, Octav Olteanu	15' +5'
2.	A finite element technique for solving integral-differential equations, Olga Martin	15' +5'
3.	Weak solutions for pseudo - Laplacian using a perturbed variational principle and via some surjectivity theorems, Irina Meghea	15' +5'
4.	Optimal control of electromagnetic energy, Monica Pîrvan, Constantin Udriște	15' +5'
	Conference closing ceremony [h.17:30]	BN 113
<i>COFFEE</i>		