## The XII-th International Conference of Differential Geometry and Dynamical Systems

(DGDS-2018)

30 August - 2 September 2018, Callatis High School \* Mangalia - Romania

## **Effective Conference program**

[5.09.2018]

	THURSDAY, 30 August 2018	
Registration	Location: The Callatis High-School - Mangalia - the registration desk	9:00-13:00
Coffee break		13:00-13:20
Opening ceremony	Location: Room A	13:20-13:30

Chairman: Ricardo Almeida and Piotr Mormul	15:00-17:30
Optimal control problems in Differential Geometry, Constantin Udriște	25' +5'
Multitime optimal control applied to resource economics, Constantin Udriște, Ionel Țevy	25' +5'
Noether symmetries in presence of nonlinear nonholonomic constraints, Paul Popescu, Marcela Popescu	25' +5'
Fractional differential equations with some applications, Ricardo Almeida	25' +5'
Nilpotent algebras hidden in Monster Tower, Piotr Mormul	25' +5'

FRIDAY, 31 August 2018 * Plenary session		
	Chairman: Vladimir Rovenski and Cornelia Livia Bejan	9:00-11:30
1.	On the volume of Sasakian manifolds, Oliver Goertsches, Hiraku Nozawa, and Dirk Töben	25' +5'
2.	Modeling of gene network functioning by dynamical systems, Vladimir Golubyatnikov	25' +5'
3.	The new Minkowski norm and integral formulae for a manifold with a set of one-forms, Vladimir Rovenski	25' +5'
4.	Integrability of the geodesic flow on the resolved conifolds over Sasaki-Einstein space T <sup>1,1</sup> , Mihai Vişinescu	25' +5'
5.	Some metrics on the tangent bundle of a Weyl manifold, Cornelia-Livia Bejan, Ilhan Gul	25' +5'
	COFFEE BREAK – 15'	

	FRIDAY, 31 August 2018 (Section session)			
A	Chairman: Viktor Redkov and George Krylov	Section A	11:45-13:45	
6.	Spin 1 particle with polarizability in the external Coulomb field, nonrelativistic description, Elena O	vsiyuk, Olga Veko, Yanina Voynova, Viktor Red'kov	20' +5'	
7.	7. Stability issues and KCC geometric objects for the system describing a spin 1 particle in the Coulomb field, Elena Ovsiyuk, Olga Veko, Yanina Voynova, Vasily Kisel, Vladimir Balan, Viktor Red'kov		15' +5'	
8.	8. Non-trivial topological properties of quasi-relativistic model of graphene, Halina Grushevskaya and George Krylov		20' +5'	
9.	9. Pseudo-Finsler geometro-thermodynamical model of two-dimensional phase transition of the first order with domain-wall distortion under collisions, Nina Krylova, Halina Grushevskaya, Vladimir Balan, George Krylov		20' +5'	
10.	Geometro-thermodynamic model of cosmological first-order phase transition with axially symmetric	metric, Halina Grushevskaya, Nina Krylova	20' +5'	
В	Chairman: Ram Shankar Gupta and Vasyl Fedorchuk	Section B	11:45-13:20	
6.	On classification of some non-singular manifolds in the space $M(1,3) \times R(u)$ and symmetry reduction	of the eikonal equation, Vasyl Fedorchuk, Volodymyr Fedorchuk	20' +5'	
7. Hamilton Ricci flow, Riemann flow and associated geometric dynamics, Iulia Elena Hirică, Constantin Udriște		25' +5'		
8.	Hypersurfaces in $E^{n+1}$ satisfying $\Delta H = \lambda H$ , Ram Shankar Gupta		20' +5'	
	General Assembly of the Balkan Socie	ty of Geometers	20'	

	SATURDAY, 1 September 2018 * Plenary session (Room A)	
	Chairman: Eberhard Malkovsky and Gabriel Pripoae	9:00-10:30
1.	Measures of noncompactness and their applications, Eberhard Malkowsky	25' +5'
2.	Invariant connections on Lie groups, Gabriel Pripoae	25' +5'
3.	Hyperbolic second-order partial differential equation-based model for structural interpolation, Tudor Barbu	25' +5'
	COFFEE BREAK - 15'	

	Chairman: Constantin Udrişte and Paul Popescu	10:45-13:00
4.	New examples and new constructions for skew-symmetric algebroids, Paul Popescu, Marcela Popescu	25' +5'
5.	Properties of the fundamental Finsler function, Constantin Udrişte, Ionel Ţevy, Ali Sapeeh Rasheed	25' +5'
6.	Roots of economic black holes, Constantin Udrişte, Massimiliano Ferrara, Ionel Ţevy	25' +5'
7.	Anti-MANOVA and applications, Hwiyoung Lee, Vladimir Balan and Victor Pătrăngenaru (communicated by Constantin Udriste)	10' +5'
8.	Discussions	30'
9.	Celebration of Prof.Dr. Vladimir Golubyatnikov's birthday	
Co	nference Closing Ceremony	13:45-14:00

## SUNDAY 2 September 2018

**Social events** \* The chosen activities are ordered on demand at the registration desk.