Titlu proiect: Metode Geometrice in Gravitatie si Dinamica Nelineara
Categoria de proiect: PN-II-ID-PCE-2011-3-0256
Contractul de finanțare: 318-01/11/2011 - 31/10/2015
Manager proiect: Vacaru Sergiu

Lista rezultate

Nr. crt.	NUME AUTORI	TITLUL ARTICOLULUI/ CĂRȚII / COMUNICĂRII ȘTIINȚIFICE	REVISTA / VOLUMUL/EDITURA IN CARE A APARUT / CONFERINTA LA CARE S-A COMUNICAT	ANUL PUBLICARII/ COMUNICARII
ARTICOLE ISI				
1	Vacaru Sergiu	Finsler branes and quantum gravity phenomentology with Lorentz symmetry violations	CLASSICAL AND QUANTUM GRAVITY	2011
2	Vacaru Sergiu Baleanu Dumitru	Fractional almost Kaehler-Lagrange geometry	Nonlinear Dynamics	2011
3	Vacaru Sergiu Baleanu Dumitru	Constant curvature coefficients and exact solutions in fractional gravity and geometric mechanics	CENTRAL EUROPEAN JOURNAL OF PHYSICS	2011
4	Vacaru Sergiu Baleanu Dumitru	Fractional curve flows and solitonic hierarchies in gravity and geometric mechanics	JOURNAL OF MATHEMATICAL PHYSICS	2011
5	Vacaru Sergiu	Covariant renormalizable anisotropic theories and off-diagonal Einstein-Yang-Mills-Higgs solutions	Europhysics Letters (EPL) 96	2011
6	Vacaru Sergiu	Modified Dispersion Relations in Horava-Lifshitz Gravity and Finsler Brane Models	General Relativity and Gravitation	2012
7	Vacaru Sergiu	Fractional Nonholonomic Ricci Flows	Chaos, Solitons & Fractals	2012
8	Vacaru Sergiu	Metric Compatible or Noncompatible Finsler-Ricci Flows	INTERNATIONAL JOURNAL OF GEOMETRIC METHODS IN MODERN PHYSICS	2012
9	Vacaru Sergiu	Principles of Einstein-Finsler Gravity and Perspectives in Modern Cosmology	INTERNATIONAL JOURNAL OF MODERN PHYSICS D	2012
10	Vacaru Sergiu	Nonholonomic Relativistic Diffusion and Exact Solutions for Stochastic Einstein Spaces	EUROPEAN PHYSICAL JOURNAL PLUS	2012
11	Vacaru Sergiu	Fractional Dynamics from Einstein Gravity, General Solutions, and Black Holes	INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS	2012
12	Vacaru Sergiu	Nonholonomic Algebroids, Finsler Geometry, and Lagrange-Hamilton Spaces	Mathematical Sciences (Springer)	2012
13	Vacaru Sergiu	Riemann-Finsler and Lagrange Gerbes and the Atiyah-Singer Theorems	Bulletin of Tansilvania University of Brasov, Series III: Mathematics, Informatics, Physics (Romania)	2012
14	Anastasiei Mihai, Sandovici Adrian	Banach Dirac bundles	INTERNATIONAL OF JOURNAL GEOMETRIC	2013

			METHODS IN MODERN PHYSICS	
15	Vacaru Sergiu	The algebraic index theorem and Fedosov quantization of Lagrange-Finsler and Einstein spaces	JOURNAL OF MATHEMATICAL PHYSICS	2013
16	Vacaru Sergiu, Stavrinos Panayiotis	Cyclic and ekpyrotic universes in modified Finsler osculating gravity on tangent Lorentz bundles	CLASSICAL AND QUANTUM GRAVITY	2013
17	Vacaru Sergiu	Super-luminal effects for Finsler branes as a way to preserve the paradigm of relativity theories	FOUNDATIONS OF PHYSICS	2013
18	Vacaru Sergiu	Hidden symmetries for ellipsoid-solitonic deformations of Kerr-Sen black holes and quantum anomalies	EUROPEAN PHYSICAL JOURNAL C	2013
19	Vacaru Sergiu	Black holes, ellipsoids, and nonlinear waves in pseudo-Finsler spaces and Einstein gravity	INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS	2013
20	Vacaru Sergiu	Banach Lie algebroids and Dirac structures	BALKAN JOURNAL OF GEOMETRY AND ITS APPLICATIONS	2013
21	Vacaru Sergiu	Obituary of Ioan Gottlieb (1929-2011)	PHYSICS TODAY	2013
22	Vacaru Sergiu	Exact solutions in modified massive gravity and off-diagonal wormhole deformations	The European Physical Journal C	2014
23	Vacaru Sergiu	Ghost-free massive f(R) theories modelled as effective Einstein spaces and cosmic acceleration	The European Physical Journal C	2014
24	Vacaru Sergiu	Covariant renormalizable modified and massive gravity theories on (non) commutative tangent Lorentz bundles	INTERNATIONAL JOURNAL OF GEOMETRIC METHODS IN MODERN PHYSICS	2014
25	Vacaru Sergiu, Veliev E. Veli, Yazici Enis	A geometric method of constructing exact solutions in modified f(R,T) gravity with Yang-Mills and Higgs interactions	INTERNATIONAL JOURNAL OF GEOMETRIC METHODS IN MODERN PHYSICS	2014
26	Savrinos Panayiotis, Vacaru Olivia, Vacaru Sergiu	Off-diagonal solutions in modified Einstein and Finsler theories on tangent Lorentz bundles	NTERNATIONAL JOURNAL OF MODERN PHYSICS D	2014
27	Vacaru Sergiu	Wormholes and off-diagonal solutions in f(R,T), Einstein and Finsler gravity theories	Springer Proceedings in Mathematics & Statistics	2014
28	Anastasiei Mihai, Peter Ioan Radu	A compactness theorem in Finsler geometry	PUBLICATIONES MATHEMATICAE-DEBRECEN	2014

ARTICOLE ALTE BAZE DE DATE

1	Vacaru Sergiu	Principles of Einstein-Finsler gravity and cosmology	Journal of Physics: Conference Series	2011
2	Vacaru Sergiu	Decoupling of field equations in Einstein and modified gravity, J. Phys. Conf. Ser. 453 (2013) 012021	JOURNAL OF PHYSICS: CONFERENCE SERIES	2013
3	Vacaru Sergiu	Diffusion and self-organized criticality in Ricci flow evolution of Einstein and Finsler spaces	SYMMETRY: Cuture and Science	2013

4	Anastasiei Mihai, Gottlieb Ioan	On a Schwarszchild-like metric	The Annals of the West University of Timisoara. Physics Series.	2013
5	Anastasiei Mihai	Dirac structures in Banach Courant algebroids	ROMAI JOURNAL	2013
6	Anastasiei Mihai	Courant algebroid structures on Banach vector bundles	ROMAI Journal	2014
7	Anastasiei Mihai, Girtu Manuela	Einstein equations in Lie algebroids.	Scientific Studies and Research. Series Mathematics and Informatics (SSRSMI)	2014
CAPITOLE CARTI				
1	Vacaru Sergiu, Baleanu Dumitru	Fractional analogous models in mechanics and gravity theories	Fractional Dynamics and Control, Part 3, editors: D. Baleanu, J. A. Tenreiro Machado and A. Luo; Springer, indexed MathSciNet:MR2905877; ISBN 978-1-4614-0456-9	2012
2	Vacaru Sergiu, Baleanu Dumitru	Fractional exact solutions and solitons in gravity	Fractional Dynamics and Control, Part 3, editors: D. Baleanu, J. A. Tenreiro Machado and A. Luo; Springer, indexed MathSciNet:MR2905877; ISBN 978-1-4614-0456-9	2012
CARTI				
1	M. Anastasiei	Selected Papers, MathSciNet MR2976668	"Alexandru Myller", Iasi, 978-973-88565-7-8	2013
n				
COMUNICARI STIINTIFICE				
1	Vacaru Sergiu	Principles of Einstein-Finsler gravity and cosmology	Journal of Physics: Conference Series 314 (2011) 012069 [Proceedings of Spanish Relativity Meeting (ERE 2010):]	2011
2	Vacaru Sergiu	Finsler Geometry Methods and Generalizations of Classical and Quantum Gravity	VII-th International Conference Finsler Extensions of Relativity Theory - FERT 2011. Abstracts	2011
3	M. Anastasiei	Banach Lie algebroids and Dirac structures	The V-th International Conference of Differential Geometry and Dynamical Systems (DGDS-2012). Abstracts	2012
4	S. Vacaru	Questions and Problems on Methodology an Habilitation on Mathematical Physics	Diaspora in Cercetarea Stiintifica si Invatamantul Superior din Romania. Abstracts	2012
5	S. Vacaru	Wormhole Off-Diagonal Solutions in f(R,T), Einstein and Finsler Gravity Theories	ERE2012 Springer Proceedings	2012
6	S. Vacaru	(Non) Commutative Ricci Solitonic Hierarchies and Deformation Quantization	Proceeding of Conf.: 3 Quantum: Algebra, Geometry, Information, Tallinn University of Technology, Estonia; July 10-14, 2012	2012
7	S. Vacaru	Generic Off-Diagonal Solutions	Thirteen Marcel	2012

		and Solitonic Hierarchies in Einstein and Modified Gravity, Parallel Section GT1 – Exact Solutions in Four and Higher Dimensions: Mathematical Aspects	Grossmann Meeting – MG13, Abstracts with Proceedings (to be published in 2014)	
8	S. Vacaru	Cosmological Solutions in Biconnection and Bimetric Gravity Theories, Oral Communication (July 5), Parallel Section AT4a – Modified Gravity	Thirteen Marcel Grossmann Meeting – MG13, abstracts and proceedings (to be published in 2014)	2012
9	S. Vacaru	Covariant Renormalizable Gravity Theories on (Non) Commutative Tangent Bundles, Oral Communication (July 3), Parallel Section QG2b – Quantum Gravity Phenomenology	Thirteen Marcel Grossmann Meeting – MG13, abstracts and proceedings (to be published in 2014)	2012
10	S. Vacaru	Noncommutative almost Kaehler – Ricci solitons and deformation quantization	XXXI Workshop on Geometric Methods in Physics, abstracts	2012
11	S. Vacaru	Decoupling of Field Equations in Einstein and Modified Gravity, talk at Session B, on June 22, 2012	J. Phys.: Conf. Ser. 543 (2013) 012021; Proceedings	2012
12	M. Anastasiei	Some generalizations of the Myers theorem	The 13th International conference of Tensor Society on Differential Geometry and its applications and Informatics besides, abstracts	2013
13	M. Anastasiei	Some Myers'type theorems in Finsler geometry	Colloquium on Differential Geometry and its Applications and IX-th Int. Conference on Finsler Extensions of Relativity Theory , abstracts	2013
14	S. Vacaru	Noncommutative Lagrange-Finsler evolution and modern gravity	Int. Conf. Of Differential Geometry and Dynamical Systems, abstracts	2013
15	S. Vacaru	Off-Diagonal Wormhole Deformations in Modified Massive Gravity, Oral communication, Parallel session – A1 – Exact solutions and their interpretation	Conference GR 20 & Amaldi 10, abstracts	2013
16	S. Vacaru	Twistors and Almost Kaehler Models of Einstein and Finsler Spaces, Oral, Parallel session – A4 – Complex and conformal methods in classical and quantum gravity, July 09. 2013	Conference GR 20 & Amaldi 10, abstracts	2013
17	S. Vacaru	A Survey of the Anholonomic Frame Deformation Method of Constructing Exact Solutions, - Poster - Parallel session – A2 – Mathematical relativity and other progress in classical gravity theory	GR20 & Amaldi 10, abstracts	2013
18	S. Vacaru	Off-Diagonal Deforms of Kerr Black Holes in Modified Massive Gravity and Higher Dimension, - Poster – Parallel	GR20 & Amaldi 10, abstract	2013

		session – A3 – Modified gravity theories		
19	S. Vacaru	Off-Diagonal Ekpyrotic Cosmological Solutions in Massive Gravity and Effective Einstein Spaces, Poster, Parallel session –B6 – Theoretical / mathematical cosmology	GR20 & Amaldi 10, abstract	2013
20	S. Vacaru	Spectral Functional for Noncommutative Almost Kaehler Ricci Flows and Lorentzian Star Products, 30 min. talk on 30 June, section Operator Algebra and Noncommutative Geometry	Joint International Meeting AMS – RMS, abstracts	2013
21	S. Vacaru	Solitonic Hierarchies for Almost Kaehler Ricci Flows and Off-Diagonal Solutions in Gravity, 30 min. talk on 27 June, section Nonlinear Evolution Equations	Joint International Meeting AMS – RMS, abstracts	2013
22	S. Vacaru	Almost Kaehler Ricci Flows and Einstein and Lagrange-Finsler Structures on Lie Algebroids	11th Panhellenic Geometric Conference, abstracts	2013
23	S. Vacaru	Nonholonomic Geometric and Deformation Quantization in Geometric Mechanics and Gravity Theories	International Workshop on Algebra and Discrete Mathematics, Brno, Czech Rep.	2014
24	M. Anastasiei	Galloway's compactness theorem on Finsler manifolds	X-th International Conference on Finsler Extensions of Relativity Theory, (FERT-2014), Brasov	2014
25	M. Anastasiei	On direct sum of a Banach vector bundle with its dual	National Scientific session the Institute of Mathematics „Octav Mayer", Iasi brach of the Romanian Academy	2014
26	M. Anastasiei	N-affine transformations on Finsler manifolds	National Conference: Applied and Industrial mathematics (RoAIMS)	2014
27	S. Vacaru	Metode geometrice in gravitatie si dinamica nelineara	Prezentare proiect IDEI la UEFISCDI	2014
ATLASE, DICTIONARE DE SPECIALITATE				
1				
n				
CERERI BREVET DE INVENTII/BREVET OBTINUT				
ALTE rezultate				
1				
n				

Lista achiziţiilor realizate în cadrul proiectului

Denumire echipament	Categorie de achiziţii*: (numai mijloace fixe)	Valoarea (lei)	Locaţie

		6		

Director proiect,

Vacaru Sergiu

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