

CURRICULUM VITAE

Nume: IONESCU

Prenume: CARMEN-LILIANA

Data si locul nasterii: 18. 09. 1971, Craiova, Jud. Dolj

Cetatenie: Romana

Titlul stiintific: Doctor in Fizica, Domeniul fundamental Stiinte Exacte, Domeniul Fizica, Specialitatea Fizica Teoretica

Titlul tezei de doctorat, anul sustinerii: Contributii la studiul teoriilor de camp cu constrangeri, 2002

Domenii de competenta: Fizica Teoretica, Fizica Matematica

Locul de munca actual: Universitatea din Craiova

Functia: Lector universitar

Limbi straine cunoscute: engleza, franceza

Lucrari stiintifice publicate in reviste cotate ISI: 15

Lucrari stiintifice publicate in revistele de specialitate ale Academiei Romane: 4

Lucrari stiintifice publicate in reviste de specialitate din strainatate necotate ISI si indexate in baze de date recunoscute: 1

Lucrari stiintifice publicate in alte reviste recunoscute de CNCSIS (categoriile B+ si B): 12

Lectii invitate si lucrari prezentate la conferinte internationale cu comitet si program: 22

Carti, monografii, capitole de carti de specialitate publicate in edituri nationale recunoscute de CNCSIS: 1

Granturi/contracte de cercetare castigate prin competitie in calitate de director (sau responsabil stiintific): 1 (grant international)

Numarul de citari: 16

Indice Hirsch (in acord cu Web of Knowledge): 4

Punctaj CNATDCU: 5,5846

LISTA

lucrarilor stiintifice in domeniul disciplinelor din postul didactic

A. Teza de doctorat

Contributii la studiul teoriilor de camp cu constrangeri, 2002

C. Lucrari indexate ISI/BDI

Lucrari in reviste cotate ISI

1. [A. Babalean, R. Constantinescu, C. Ionescu, Nonminimal BRST terms for the Yang–Mills theory, J. Phys. A: Math. Gen. 31 \(1998\) 8653-8659](#)
2. [A. Babalean, R. Constantinescu, C. Ionescu, The gauge fixing problem in the \$sp\(3\)\$ BRST canonical formalism, J. Phys. A: Math. Gen. 32 \(1999\) 3005–3012](#)
3. [R. Constantinescu, C. Ionescu, The \$sp\(3\)\$ BRST symmetry for reducible dynamical systems, Mod. Phys. Lett. A 15, No. 16 \(2000\) 1037–1042](#)
4. [R. Constantinescu, C. Ionescu, The Equivalence between the Lagrangean and the Hamiltonian formalisms for the extended BRST Symmetry, International Journal of Modern Physics A 21, No. 7 \(2006\) 1567–1575](#)
5. [R. Constantinescu, C. Ionescu, From the Hamiltonian to the Lagrangean formalism for 1-reducible theories. The Freedman-Townsend model, Central European Journal of Physics, Volume 4, No. 4 \(2006\) 511–521](#)
6. [R. Constantinescu, C. Ionescu, Multidifferential complexes and their application to gauge theories, International Journal of Modern Physics A 21, No. 32 \(2006\) 6629–6640](#)
7. [R. Constantinescu, C. Ionescu, Gauge fixing procedure in the extended BRST theory, Annalen der Physik 15 \(2006\) 169–176](#)
8. [C. Ionescu, The \$sp\(3\)\$ BRST Hamiltonian formalism for Yang–Mills fields, Modern Physics Letters A 23, No. 10 \(2008\) 737–750](#)
9. [R. Constantinescu, C. Ionescu, A Chern-Simons gauge-fixed Lagrangian in a “non-canonical” BRST approach, J. Phys. A: Math. Theor. 42 \(2009\) 085401, 9pp](#)
10. [R. Constantinescu, C. Ionescu, The Yang-Mills fields: from gauge theory to the mechanical model, Central European Journal of Physics, Vol. 7, No. 4 \(2009\) 711–720](#)
11. [R. Constantinescu, C. Ionescu, Lagrangean \$sp\(3\)\$ BRST formalism for massive vectorial bosonic fields, Romanian Journal of Physics, Vol. 55, Nos. 9-10 \(2010\) 961-970](#)
12. [R. Constantinescu, C. Ionescu, Hot Quark-Gluon Plasma and the Chapline-Manton Model, Romanian Journal of Physics, Vol. 56, Nos. 1–2 \(2011\) 53–61](#)
13. [R. Constantinescu, C. Ionescu, M. Stoicescu, Propagating nerve impulse in quasi-steady state conditions. Romanian Journal of Physics, Vol 58, Nos 5-6 \(2013\) 538–549](#)
14. [C. Ionescu, G. Florian, E. Panaintescu, I. Petrisor, Nonlinear control of chaotic circuits, Romanian Journal of Physics, Vol. 61, Nos. 1-2 \(2016\) 183 – 193](#)

15. [C. Ionescu, R. Constantinescu, M. Stoicescu, Functional expansions for finding traveling wave solutions, Journal of Applied Analysis and Computation, vol. 10, no.2, \(2020\) 569-583](#)

Lucrari in reviste indexate BDI

1. [A. Babalean, R. Constantinescu, C. Ionescu, Extended BRST symmetries in the gauge field theories, Romanian Reports in Physics 53 \(2001\) 9–14](#)
2. [R. Constantinescu, C. Ionescu, Combined dynamics of physical and ghost-type fields in the Freedmann–Townsend model, Romanian Journal of Physics 53, No 9–10 \(2008\) 1077–1083](#)
3. [R. Constantinescu, C. Ionescu, The nonabelian gauge fields and their dynamics in the finite space of color factors, Journal of Institute of Astronomy Belgrade \(2010\)](#)
4. [R. Constantinescu, C. Ionescu, Hot Quark-Gluon Plasma and Chapline–Manton model, Romanian Reports in Physics 62 \(2010\) 53 - 61](#)

D. Lucrari stiintifice publicate in reviste din tara recunoscute de CNCSIS

1. [R. Constantinescu, C. Ionescu: “Ghost structure for generalized BRST symmetry”, Physics AUC 7 \(1997\),100-104.](#)
2. [R. Constantinescu, C. Ionescu: “Generalized structures in the BRST quantization”, Physics AUC 8 \(1998\) 28-34.](#)
3. [R. Constantinescu, C. Ionescu: “Level structure of the phase space for the extended BRST symmetries”, Physics AUC 10 \(part I\) \(2000\), 119-123.](#)
4. [R. Constantinescu, C. Ionescu: “The gauge-fixing procedure in the \$sp\(3\)\$ Hamiltonian BRST formalism for the Yang - Mills - theory”, Annals of West University of Timisoara, 43 \(2002\), 29-35.](#)
5. [R. Constantinescu, C. Ionescu: “ “Extended phase space for 1-reducible theories”, Phys. AUC 12 \(part II\) \(2002\), no.2, 116-122.](#)
6. [R. Constantinescu, C. Ionescu: “ “Equivalent \$sp\(2\)\$ path integrals for the abelian gauge field”,Physics AUC 13 \(2003\), 187-192.](#)
7. [R. Constantinescu, C. Ionescu: “Level structure of the configuration space in the Lagrangian \$sp\(3\)\$ BRST theories”, Physics AUC 14 \(2004\), 117 – 126.](#)
8. [C. Ionescu Masive vector field with higher order derivatives, Physics AUC 16 \(part I\) \(2006\) 97–102](#)
9. [R. Constantinescu, C. Ionescu, Quantum aspects of the \$sp\(2\)\$ BRST path integrals for models with nonlinear gauge superalgebra, Phys. AUC 18 \(2008\) 64 – 72](#)

10. [R. Constantinescu, C. Ionescu, Non-canonical operators in the gauge fixing procedure, Annals of Physics, West University of Timisoara, Vol 48 \(2006\) 24–33](#)
11. [R. Constantinescu, C. Ionescu, Quantum aspects of the \$sp\(2\)\$ BRST path integrals for models with nonlinear gauge superalgebra, Phys. AUC 18 \(part I\) \(2008\) 64 - 72](#)
12. [R. Constantinescu, C. Ionescu, I. Petrisor, Stability analysis and synchronization of Chua systems, Annals of the University of Craiova, Physics AUC 27 \(2017\) 61-68](#)

E. Lectii invitate si lucrari prezentate la conferinte internationale

1. [R. Constantinescu, C. Ionescu, The Batalin–Lavrov–Tyutin method in BRST \$sp\(3\)\$ Hamiltonian quantization, Proceedings of 1 st International Spring School and Workshop on Quantum Field Theory and Hamiltonian Systems, May 1998, Călimănești, Romania, \(2001\) 1–6](#)
2. [R. Constantinescu, C. Ionescu, R. Popa, Global symmetries for the Laser radiation, Proceedings of SPIE, SIOEL '99, Sixth Symposium on Optoelectronics, 22–24 September 1999, Bucuresti Vol. 4068 \(2000\) 255–260](#)
3. [R. Constantinescu, C. Ionescu, The generalized BRST Hamiltonians for irreducible theories, Proceedings of the 2 nd International Spring school and workshop on Quantum Field Theory and Hamiltonian Systems, May 2000, Călimănești, Romania \(2000\) 182–187](#)
4. [R. Constantinescu, C. Ionescu: “Nonlinear dynamics of the ghost type variables, invited lecture given in the International Workshop on Plasma Dynamics, Queshm, Iran, 15-20 December 2002.](#)
5. [R. Cimpoiasu, R. Constantinescu, C. Ionescu, Lagrangian structure for integrable systems, Proceedings of the 3 rd International Spring school and workshop on Quantum Field Theory and Hamiltonian Systems, 6–12 may 2002, Călimănești, Romania \(2002\) 73–83](#)
6. [R. Constantinescu, C. Ionescu, Nonlinear dynamics of the ghost type variables, Proceedings of "The International Workshop on Plasma Dynamics", Queshm, Iran 15–20 December 2002](#)
7. [R. Constantinescu, C. Ionescu, The \$sp\(3\)\$ BRST Hamiltonian formalism for the Freedman–Townsend model and its connection with the Lagrangian one, Proceedings of the 4 th International School and Workshop on Quantum Field Theory and Hamiltonian Systems, 16–21 October 2004, Calimanesti–Caciulata, Romania \(2005\) 206–214](#)
8. [R. Cimpoiasu, R. Constantinescu, C. Ionescu, Symmetry operators for dynamical systems by high order ODEs, Proceedings of the 4 th International School and Workshop on Quantum Field Theory and Hamiltonian Systems, 16–21 October 2004, Calimanesti–Caciulata, Romania \(2005\) 215–218](#)
9. [A. Boldea, C. Ionescu, Invariants of the zonal-flow models, Proceedings of the 5 th International School and Workshop on Quantum Field Theory and Hamiltonian Systems, 20–26 May 2004, Calimanesti–Caciulata, Romania \(2006\) 205–208](#)

10. [R. Constantinescu, C. Ionescu, Complete dynamics in the extended phase space, Proceedings of the 6 th International School and Workshop on Quantum Field Theory and Hamiltonian Systems, 6–11 May 2008, Calimanesti – Caciulata, Romania \(2008\) 141–150](#)
11. [C. Ionescu, The spectrum of the generators in the \$sp\(3\)\$ BRST Lagrangian formalism, Proceedings of the 6 th International School and Workshop on Quantum Field Theory and Hamiltonian Systems, 6–11 May 2008, Calimanesti–Caciulata, Romania \(2008\) 188–198](#)
12. [R. Constantinescu, C. Ionescu, Extended BRST symmetries. Quantum Approach, AIP Conference Proceedings 1131 \(2009\) 17-22](#)
13. [R. Constantinescu, C. Ionescu, Combined dynamics of physical and ghost-type fields in the Freedmann-Townsend model, Romanian Journal of Physics, Vol. 53, Issue 9-10 \(2008\) 1077-1082](#)
14. [R. Constantinescu, C. Ionescu, The nonabelian gauge fields and their dynamics in the finite space of color factor, invited lecture in Spring School on Stings, Cosmology and Particles, Nis, April 2009](#)
15. [R. Constantinescu, C. Ionescu, M.Stoicescu, Adomian Decomposition Method for Quark Gluon Plasma Model, invited lecture at TIM'10 \(25-27 nov.2010\),AIP Conference Proceedings Volume 1387 \(2011\) 29-36](#)
16. [R. Constantinescu, C. Ionescu, Chaos and Stabilizing Mechanisms for Yang-Mills Mechanical Models, Proceedings of the "7th School and Workshop on Quantum Field Theory & Hamiltonian Systems", 10-15 Mai 2010, Calimanesti, Romania, Annals of the University of Craiova, Physics AUC 21 \(Special Issue\) \(2011\) 207-215](#)
17. [C. Ionescu, E. Panaintescu, M. Stoicescu, Neural Flows in Hopfield Network Approach, Analele Universității de Vest din Timișoara Vol. LVII, 2013 Seria Fizică, 9 pagini, <https://www.degruyter.com/downloadpdf/j/awutp.2013.57.issue-1/awutp-2015-0101/awutp-2015-0101.xml>](#)
18. [R. Constantinescu, C. Ionescu, E. Panaintescu, I. Petrisor, Control and optimization techniques for "jerk" type circuits, presented in the conf. "Theoretical and computational methods in dynamical systems and fractal geometry", Maribor, April 2015 \[http://www.camtp.uni-mb.si/camtp/valera/DS2015/book_abstracts.pdf\]\(http://www.camtp.uni-mb.si/camtp/valera/DS2015/book_abstracts.pdf\)](#)
19. [C. Ionescu, M. A. Streche, M. Stoicescu, Special case for Chua Circuit. Chaos and regularity, Quantum Fields and Nonlinear Phenomena Conference, Sinaia 09-13 martie 2016\[http://cis01.central.ucv.ro/physics/ro/en/workshop_Sinaia_2016/index.html\]\(http://cis01.central.ucv.ro/physics/ro/en/workshop_Sinaia_2016/index.html\)](#)
20. [R. Constantinescu, C. Ionescu, A. Streche, Mathematical Methods in Nonlinear Dynamics, "The Turkish Physical Society 33rd International Physics Conference", 6-10 sept. 2017 \(<http://tfd33.turkfizikdernegi.org/en/>\)](#)
21. [R. Constantinescu, C. Ionescu, A. Streche, A. Florian, Power law method for finding soliton solutions of the 2+1 Ricci flow model, "The 9th Mathematical Physics Meeting: School and Conference in Modern Mathematical Physics" care s-a desfasurat intre 18-23 septembrie 2017 la Belgrad \(<http://mphys9.ipb.ac.rs/index.php>\), Proceedings of the 9th MATHEMATICAL PHYSICS MEETING: School and Conference on Modern Mathematical Physics](#)

September 18 – 23, 2017, Belgrade, Serbia, ISBN: 978-86-82441-48-9, pp 135-146

22. R. Constantinescu, C. Ionescu, A. Pauna, A reduction method for solving nonlinear PDEs, Workshop on Quantum Fields and Nonlinear Phenomena, 27-29 sept. 2020, held online

G. Monografii

G1. Monografii stiintifice

1. Simetrii Becchi-Rouet-Stora-Tyutin extinse
Autor: C. Ionescu
Editura Universitaria, Craiova, 2007, 364 pagini, ISBN 973-742-077-2

I. Granturi si contracte de cercetare castigate prin competitie

I1. Internationale

1. The knowledge of the Universe: between the reality and the mental construct
Tipul contractului: Grant Univ. Interdisciplin. Paris
Numarul contractului/anul: GPSSMAP07/2006/2007
Valoarea contractului (pentru Univ. din Craiova): 24700 Euro
Director: R. Constantinescu
Calitatea: Membru
2. South-East European Network in Mathematics and Theoretical Physics SEENET-MTP
Tipul contractului: Grant UNESCO (BRESCE Office Venetia)
Numarul contractului: AFC 10-12/2009, 2009-2010
Valoarea contractului (pentru Univ. din Craiova) 7125 Euro
Responsabil: C. Ionescu

I2. Nationale

1. Structuri dinamice complexe in sisteme neliniare
Numarul contractului/anul: 374/11/05.11.2003
Subcontract Univ. Craiova 45 C/04.11.2003
Valoarea subcontractului (pentru Univ. din Craiova): 7000 RON
Director: D. Grecu (IFIN HH)
Director subcontract: R. Constantinescu
Calitatea: Membru
2. Ecuatii de evolutie si conditii de integrabilitate pentru sisteme dinamice
Numarul contractului/anul: 40202/2003, 33062/24.06.2004, 34677/24.06.2005
Tipul grantului: A
Codul CNCSIS: 734/2003
Valoarea contractului: 37000 RON
Director : R. Constantinescu
Calitatea: Membru

3. Structuri coerente versus comportament haotic in structuri neliniare complexe
Nr contractului/anul: CEx05-D11-09/3.10.2005, Subcontract Univ. Craiova C240/2005
Tipul contractului: CEEEX
Valoarea contractului (Univ. din Craiova): 300000 RON
Director: R. Constantinescu
Calitatea: Membru