

# CURRICULUM VITAE

## IDENTITY

**First name:** Eugen-Mihăiță

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**Date and place of birth:** 24.06.1974, Bailesti, Dolj County, Romania

**Affiliation:** Department of Physics, University of Craiova, 13 A. I. Cuza Str.,  
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## STUDIES

- **Graduate:**
  - 1992-1997, University of Craiova, Faculty of Sciences, Physics section, Theoretical Physics specialization
  - 1995-1999, University of Craiova, Faculty of Mathematics and Informatics, Mathematics specialization
- **Post-graduate:**
  - 1997-1998, University of Craiova, Faculty of Sciences, Physics section, *Quantum Field Theory* specialization
  - 2013-2015, The West University of Timisoara, Faculty of Mathematics and Informatics, *Geometric and analytic modeling of systems* program
- **PhD:** 1998-2002, University of Craiova, fundamental domain Exact Sciences, domain Physics, specialization Theoretical Physics  
PhD thesis: *Irreducible BRST approaches of the reducible theories*  
PhD Advisor: Professor Constantin Bizdadea
- **Habilitation:** 2016, University of Craiova, PhD domain Physics  
Habilitation thesis: *A cohomological approach to interactions in gravity-related models*

## WORKING EXPERIENCE

- February 2001 – March 2005, assistant professor, Faculty of Physics, University of Craiova
- March 2005 – October 2008, lecturer, Faculty of Physics, University of Craiova
- October 2008 – March 2017, associate professor, Department of Physics, University of Craiova
- March 2017 –Present, professor, Department of Physics, University of Craiova

## SCIENTIFIC RESEARCH ACTIVITIES

- **Research domains:** Theoretical Physics, Mathematical Physics, Differential Geometry
- **Research topics**
  - Dynamics of constrained systems
  - Quantum Field Theory
  - Quantization of constrained systems

- Local BRST cohomology – construction of consistent interactions in gauge field theory
- Jacobi-like structures
- Dual pairs

## SCIENTIFIC PUBLICATIONS

### In ISI rated journals

1. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, *Irreducible Hamiltonian BRST approach to topologically coupled Abelian forms*, [Physica Scripta \*\*60\*\* \(1999\) 120-130](#)
2. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, *Massive Yang-Mills theory with no Dirac bracket*, [Nuovo Cimento \*\*A112\*\* \(1999\) 1033-1039](#)
3. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, *Irreducible Hamiltonian BRST symmetry for reducible first-class systems*, [International Journal of Modern Physics \*\*A15\*\* \(2000\) 3001-3017](#)
4. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, *Freedman-Townsend vertex from Hamiltonian BRST cohomology*, [Classical and Quantum Gravity \*\*17\*\* \(2000\) 2007-2016](#)
5. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, *Irreducible Hamiltonian BRST-anti-BRST symmetry for reducible systems*, [Journal of Physics A: Mathematical and General \*\*33\*\* \(2000\) 6901-6923](#)
6. C. Bizdadea, E. M. Cioroianu, I. Negru, S. O. Saliu, *Cohomological derivation of the couplings between an Abelian gauge field and matter fields*, [Annalen der Physik \*\*10\*\* \(2001\) 415-427](#)
7. C. Bizdadea, E. M. Cioroianu, M. T. Miauta, I. Negru, S. O. Saliu, *Lagrangian cohomological couplings among vector fields and matter fields*, [Annalen der Physik \*\*10\*\* \(2001\) 921-933](#)
8. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, *Irreducible Freedman-Townsend vertex and Hamiltonian BRST cohomology*, [Annalen der Physik \*\*11\*\* \(2002\) 151-161](#)
9. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, *Hamiltonian cohomological derivation of four-dimensional nonlinear gauge theories*, [International Journal of Modern Physics \*\*A17\*\* \(2002\) 2191-2210](#)
10. C. Bizdadea, E. M. Cioroianu, I. Negru, S. O. Saliu, *Lagrangian interactions within a special class of covariant mixed-symmetry type tensor gauge fields*, [The European Physical Journal \*\*C27\*\* \(2003\) 457-465](#)
11. C. Bizdadea, C. C. Ciobirca, E. M. Cioroianu, S. O. Saliu, S. C. Sararu, *Hamiltonian BRST deformation of a class of  $n$ -dimensional BF-type theories*, [Journal of High Energy Physics \*\*JHEP 0301\*\* \(2003\) 049](#)
12. C. Bizdadea, C. C. Ciobirca, E. M. Cioroianu, I. Negru, S. O. Saliu, S. C. Sararu, *Interactions of a single massless tensor field with the mixed symmetry  $(3,1)$ . No-go results*, [Journal of High Energy Physics \*\*JHEP 0310\*\* \(2003\) 019](#)
13. C. Bizdadea, C. C. Ciobirca, E. M. Cioroianu, S. O. Saliu, S. C. Sararu, *Four-dimensional couplings among BF and matter theories from BRST cohomology*, [Annalen der Physik \*\*12\*\* \(2003\) 543-571](#)

14. E. M. Babalic, C. C. Ciobirca, [E. M. Cioroianu](#), I. Negru, S. C. Sararu, *Two-dimensional interactions in a class of tensor gauge fields from local BRST cohomology*, [Acta Physica Polonica B34 \(2003\) 2673-2682](#)
15. C. Bizdadea, C. C. Ciobirca, [E. M. Cioroianu](#), S. O. Saliu, S. C. Sararu, *Interactions of a massless tensor field with the mixed symmetry of the Riemann tensor. No-go results*, [The European Physical Journal C36 \(2004\) 253-270](#)
16. C. C. Ciobirca, [E. M. Cioroianu](#), S. O. Saliu, *Cohomological BRST aspects of the massless tensor field  $(k,k)$* , [International Journal of Modern Physics A19 \(2004\) 4579-4619](#)
17. [E. M. Cioroianu](#), S. C. Sararu, *Two-dimensional interactions between a BF-type theory and a collection of vector fields*, [International Journal of Modern Physics A19, \(2004\) 4101-4125](#)
18. C. Bizdadea, [E. M. Cioroianu](#), A. C. Lungu, S. O. Saliu, *No multi-graviton theories in the presence of a Dirac field*, [Journal of High Energy Physics JHEP 0502 \(2005\) 016](#)
19. [E. M. Cioroianu](#), S. C. Sararu, *Self-interactions in a topological BF-type model in  $D=5$* , [Journal of High Energy Physics 0507 \(2005\) 056](#)
20. C. Bizdadea, [E. M. Cioroianu](#), S. O. Saliu, S. C. Sararu, *Couplings of a collection of BF models to matter theories*, [The European Physical Journal C41 \(2005\) 401-420](#)
21. C. Bizdadea, [E. M. Cioroianu](#), D. Cornea, S. O. Saliu, S. C. Sararu, *No interactions for a collections of spin-two fields intermediated by a massive Rarita-Schwinger field*, [The European Physical Journal C48 \(2006\) 265-289](#)
22. C. Bizdadea, C. C. Ciobirca, [E. M. Cioroianu](#), S. O. Saliu, *Interactions between a massless tensor field with the mixed symmetry of the Riemann tensor and a massless vector field*, [Journal of Physics A: Mathematical and General 39 \(2006\) 10549-10564](#)
23. C. Bizdadea, [E. M. Cioroianu](#), I. Negru, S. O. Saliu, S. C. Sararu, *On the generalized Freedman-Townsend model*, [Journal of High Energy Physics JHEP 0610 \(2006\) 004](#)
24. C. Bizdadea, [E. M. Cioroianu](#), A. C. Lungu, *No interactions for a collection of Weyl gravitons intermediated by a scalar field*, [International Journal of Modern Physics A21 \(2006\) 4083-4126](#)
25. C. Bizdadea, [E. M. Cioroianu](#), A. C. Lungu, S. C. Sararu, *No cross-interactions between the Weyl graviton and the massless Rarita-Schwinger field*, [Annalen der Physik 15 \(2006\) 416-433](#)
26. [E. M. Cioroianu](#), S. C. Sararu, *PT-Symmetry breaking Hamiltonian interactions in BF models*, [International Journal of Modern Physics A21 \(2006\) 2573-2599](#)
27. C. Bizdadea, [E. M. Cioroianu](#), S. C. Sararu, *Couplings between a collection of BF models and a set of three-form gauge fields*, [International Journal of Modern Physics A21 \(2006\) 6477-6490](#)
28. C. Bizdadea, [E. M. Cioroianu](#), S. O. Saliu, S. C. Sararu, O. Balus, *An irreducible approach to second-order reducible second-class constraints*, [Journal of Physics A: Mathematical and Theoretical 40 \(2007\) 14537-14554](#)
29. C. Bizdadea, [E. M. Cioroianu](#), D. Cornea, E. Diaconu, S. O. Saliu, S. C. Sararu, *Interactions for a collection of spin-two fields intermediated by a massless p-form*, [Nuclear Physics B794 \(2008\) 442-494](#)

30. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, S. C. Sararu, M. Iordache, *Four-dimensional couplings among BF and massless Rarita-Schwinger theories: a BRST cohomological approach*, [The European Physical Journal C58 \(2008\) 123-149](#)
31. E. M. Cioroianu, E. Diaconu, S. C. Sararu, *On the uniqueness of  $D = 11$  interactions among a graviton, a massless gravitino and a three-form I: Pauli Fierz and three-form*, [International Journal of Modern Physics A23 \(2008\) 4721-4755](#)
32. E. M. Cioroianu, E. Diaconu, S. C. Sararu, *On the uniqueness of  $D = 11$  interactions among a graviton, a massless gravitino and a three-form II: Three-form and gravitini*, [International Journal of Modern Physics A23 \(2008\) 4841-4859](#)
33. E. M. Cioroianu, E. Diaconu, S. C. Sararu, *On the uniqueness of  $D = 11$  interactions among a graviton, a massless gravitino and a three-form III: Graviton and gravitini*, [International Journal of Modern Physics A23 \(2008\) 4861-4875](#)
34. E. M. Cioroianu, E. Diaconu, S. C. Sararu, *On the uniqueness of  $D = 11$  interactions among a graviton, a massless gravitino and a three-form IV: Putting things together*, [International Journal of Modern Physics A23 \(2008\) 4877-4923](#)
35. C. Bizdadea, E. M. Cioroianu, I. Negru, S. O. Saliu, S. C. Sararu, O Balus, *Reducible second-class constraints of order  $L$ : An irreducible approach*, [Nuclear Physics B812 \(2009\) 12-45](#)
36. C. Bizdadea, E. M. Cioroianu, A. Danehkar, M. Iordache, S. O. Saliu, S. C. Sararu, *Consistent interactions of dual linearized gravity in  $D=5$ : couplings with a topological BF model*, [The European Physical Journal C63 \(2009\) 491-519](#)
37. E. M. Cioroianu, E. Diaconu, S. C. Sararu, *On the consistent interactions in  $D = 11$  among a graviton, a massless gravitino and a three-form*, [Fortschritte der Physik-Progress of Physics 57 \(2009\) 535-541](#)
38. E. M. Cioroianu, S. C. Sararu, O. Balus, *First-class approaches to massive 2-forms*, [International Journal of Modern Physics A25 \(2010\) 185-198](#)
39. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, E. M. Babalic, *Dual linearized gravity in  $D=6$  coupled to a purely spin-two field of mixed symmetry  $(2,2)$* , [Fortschritte der Physik 58 \(2010\) 341-363](#)
40. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, E. M. Babalic, *Yes-go cross-couplings in collections of tensor fields with mixed symmetries of the type  $(3,1)$  and  $(2,2)$* , [International Journal of Modern Physics A25 \(2010\) 1211-1238](#)
41. E. M. Cioroianu, *Note on the dynamics of a pseudo-classical spinning particle*, [Modern Physics Letters A26 \(2011\) 589-601](#)
42. E. M. Cioroianu, *Many faces of the massless tensor gauge field of degree two*, [International Journal of Modern Physics A27 \(2012\) art. no 1250189](#)
43. C. Bizdadea, E. M. Cioroianu, S. C. Sararu, O. Balus, *Irreducible analysis of reducible second-class constraints: the example of gauge-fixed three- and two-forms with Stueckelberg coupling*, [Romanian Reports in Physics 62 \(2010\) 3-17](#)
44. E. M. Cioroianu, *Tensor gauge fields of degree three*, [Romanian Journal of Physics 58 \(2013\) 529-542](#)
45. C. Bizdadea, M. M. Barcan, E. M. Cioroianu, M. T. Miauta, S. O. Saliu, *Another relationship between first- and second-order systems*, [Romanian Journal of Physics 58 \(2013\) 428-433](#)

46. C. Bizdadea, E. M. Cioroianu, M. T. Miauta, S. O. Saliu, S. C. Sararu, L. Stanciu-Oprean, *Towards a full classification of consistent interaction vertices in topological BF theories*, [Romanian Journal of Physics 58 \(2013\) 434-445](#)
47. E. M. Cioroianu, *Dynamical aspects of a massless tensor gauge field of degree  $(k+1)$* , [Romanian Journal of Physics 61 \(2016\) 37-51](#)
48. E. M. Cioroianu, *Rich gauge structures from a unitary approach of some massless gauge fields of spins one and two*, [International Journal of Modern Physics A32 \(2017\) art. No 1750044](#)
49. E.M. Cioroianu, C. Vizman, *Jacobi structures with background*, [International Journal of Geometric Methods in Modern Physics 17 \(2020\) 2050063](#)
50. E. M. Cioroianu, C. Vizman, *A linear algebraic setting for Jacobi structures*, [Journal of Geometry and Physics 159 \(2021\) 103904](#)

### **In journals of the Romanian Academy or journals indexed in international databases**

1. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, *Irreducible Hamiltonian BRST-anti-BRST formalism for off-shell reducible theories*, [Romanian Journal of Physics 45 \(2000\) 519-529](#)
2. C. Bizdadea, C. C. Ciobirca, E. M. Cioroianu, S. O. Saliu, S. C. Sararu, *BRST cohomological results on the massless tensor field with the mixed symmetry of the Riemann tensor*, [International Journal of Geometric Methods in Modern Physics 1 \(2004\) 335-366](#)
3. E. M. Cioroianu, S.C. Sararu, *Consistent interactions between BF and massive Dirac fields. A cohomological approach*, [Romanian Reports in Physics 57 \(2005\) 189-203](#)
4. C. C. Ciobirca, E. M. Cioroianu, S. O. Saliu, *Cohomological aspects of massless, free tensors with the mixed symmetry  $(k,k)$* , [Romanian Journal of Physics 50 \(2005\) 269-278](#)
5. C. Bizdadea, C. C. Ciobirca, E. M. Cioroianu, S. O. Saliu, S. C. Sararu, *BF models*, [Romanian Journal of Physics 50 \(2005\) 241-248](#)
6. C. Bizdadea, O. Balus, E. M. Cioroianu, S. O. Saliu, S. C. Sararu, *Irreducible approach to  $L$ -order reducible second-class theories*, [Romanian Journal of Physics 53 \(2008\) 1023-1031](#)
7. E. M. Cioroianu, E. Diaconu, S. C. Sararu, *On the cohomological derivation of  $D=11$ ,  $N=1$  SUGRA*, [Romanian Journal of Physics 53 \(2008\) 1059-1068](#)

### **In proceedings of international scientific meetings (conferences, schools, workshops)**

1. C. Bizdadea, C. C. Ciobirca, E. M. Cioroianu, I. Negru, S. O. Saliu, S. C. Sararu, *Interactions in theories with mixed-symmetry tensor fields*, [Proceedings of the "4<sup>th</sup> International School and Workshop on Quantum Field Theory and Hamiltonian Systems"](#), 16-21 October 2004, Calimanesti, Romania, 90-110
2. C. Bizdadea, C. C. Ciobirca, E. M. Cioroianu, S. O. Saliu, S. C. Sararu, *Interactions in BF models*, [Proceedings of the "4<sup>th</sup> International School and Workshop on Quantum Field Theory and Hamiltonian Systems"](#), 16-21 October 2004, Calimanesti, Romania, 184-196
3. E. M. Cioroianu, S. C. Sararu, *Lagrangian interactions in a topological BF-type model in  $D=5$  from a cohomological approach*, [Proceedings of the "4<sup>th</sup> School and Workshop on Quantum Field Theory & Hamiltonian Systems"](#), 16-21 October 16-21, 2004, Calimanesti, Romania, 197-205

4. C. Bizdadea, E. M. Cioroianu, D. Cornea, A. C. Lungu, S. O. Saliu, S. C. Sararu, *Consistent interactions between the spin-two field and fermionic fields*, [Proceedings of the "5<sup>th</sup> International School and Workshop on Quantum Field Theory and Hamiltonian Systems"](#), 20-26 May 2006, Calimanesti, Romania, 168-193
5. C. Bizdadea, E. M. Cioroianu, S. C. Sararu, *PT-invariant couplings between a collection of BF models and a system of 3-form gauge fields*, [Proceedings of the "5<sup>th</sup> International School and Workshop on Quantum Field Theory and Hamiltonian Systems"](#), 20-26 May 2006, Calimanesti, Romania, 224-232
6. E. M. Cioroianu, E. Diaconu, S. C. Sararu, *No interactions for a collection of Weyl gravitons intermediated by a one-form gauge field*, [Proceedings of the "5<sup>th</sup> School and Workshop on Quantum Field Theory & Hamiltonian Systems"](#), 20-26 May 2006, Calimanesti, Romania, 233-237
7. E. M. Cioroianu, E. Diaconu, S. C. Sararu, *Consistent couplings between an Abelian three-form and a non-massive Rarita-Schwinger field in  $D=11$* , [Proceedings of the "5<sup>th</sup> School and Workshop on Quantum Field Theory & Hamiltonian Systems"](#), 20-26 May 2006, Calimanesti, Romania, 257-262
8. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, S. C. Sararu, *Topological BF models in interaction with two-form gauge fields. The generalized Freedman-Townsend model*, Lecture given within the program "Poisson Sigma Models, Lie Algebroids, Deformations, and Higher Analogues", organizers H. Bursztyn, H. Grosse and T. Strobl, 1 August – 21 September 2007, Erwin Schrodinger Institute, Vienna, Austria
9. C. Bizdadea, E. M. Cioroianu, D. Cornea, E. Diaconu, S. O. Saliu, S. C. Sararu, *No cross-couplings among different spin-two fields intermediated by a massless p-form*, [Proceedings of the "6<sup>th</sup> International School and Workshop on Quantum Field Theory and Hamiltonian Systems"](#), 6-11 May 2008, Calimanesti, Romania, 151-165
10. C. Bizdadea, O. Balus, E. M. Cioroianu, S. O. Saliu, S. C. Sararu, *Irreducible Dirac bracket for gauge-fixed four-forms*, [Proceedings of the "6<sup>th</sup> International School and Workshop on Quantum Field Theory and Hamiltonian Systems"](#), 6-11 May 2008, Calimanesti, Romania, 207-213
11. E. M. Cioroianu, I. Negru, S. C. Sararu, *Massless QCD-like theories*, [Proceedings of the "6<sup>th</sup> School and Workshop on Quantum Field Theory & Hamiltonian Systems"](#), 6-11 May 2008, Calimanesti, Romania, 199-206
12. E. M. Cioroianu, E. Diaconu, S. C. Sararu, *11-dimensional Supergravity as an interacting theory on Minkowski space*, [Proceedings of the "6<sup>th</sup> School and Workshop on Quantum Field Theory & Hamiltonian Systems"](#), 6-11 May 2008, Calimanesti, Romania, 219-229
13. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, S. C. Sararu, M. Iordache, *Massless gravitino interactions mediated by a topological field model*, Proceedings of the "Physics Conference TIM-08", Timisoara, Romania, November 28-29, 2008, [AIP Conference Proceedings 1131 \(2009\), 23-28](#)
14. C. Bizdadea, E. M. Cioroianu, A. Danekar, M. Iordache, S. O. Saliu, S. C. Sararu, *BF models in dual formulations of linearized gravity*, Proceedings of the "Physics Conference TIM-08", Timisoara, Romania, November 28-29, 2008, [AIP Conference Proceedings 1131 \(2009\), 29-35](#)
15. C. Bizdadea, E. M. Cioroianu, I. Negru, S. O. Saliu, S. C. Sararu, *Interactions in theories with mixed symmetry tensor fields: Yes-go results*, Proceedings of the "Physics Conference



TIM-09", Timisoara, Romania, November 27-28, 2009, [AIP Conference Proceedings 1262 \(2010\) 3-12](#)

16. C. Bizdadea, [E. M. Cioroianu](#), M. T. Miauta, S. O. Saliu, S. C. Sararu, *Consistent interactions involving dual formulations of linearized gravity in terms of massless tensor fields with the mixed symmetry  $(k,1)$* , Proceedings of the "Physics Conference TIM-10", Timisoara, Romania, November 25-27, 2010, [AIP Conference Proceedings 1387 \(2011\) 78-85](#)
17. [E. M. Cioroianu](#), *Exotic interactions between Weyl gravitons and massless zero-charge spin-1/2 particles*, Proceedings of the "Physics Conference TIM-11", Timisoara, Romania, November 25-27, 2010, [AIP Conference Proceedings 1387 \(2011\) 59-65](#)
18. C. Bizdadea, [E. M. Cioroianu](#), I. Negru, S. O. Saliu, S. C. Sararu, M. Toma, *Linearized gravity and its dual formulations: Yes-go results on their consistent couplings*, [Proceedings of the "7<sup>th</sup> School and Workshop on Quantum Field Theory&Hamiltonian Systems"](#), 10-15 May, Calimanesti, Romania, 216-233
19. C. Bizdadea, [E. M. Cioroianu](#), I. Negru, S. C. Sararu, *Interactions between Weyl graviton and massless spin-3/2 particles. No-go results*, [Proceedings of the "7<sup>th</sup> School and Workshop on Quantum Field Theory&Hamiltonian Systems"](#), 10-15 May, Calimanesti, Romania, 280-288
20. C. Bizdadea, [E. M. Cioroianu](#), S. O. Saliu, S. C. Sararu, L. Stanciu-Oprean, *Topological BF models with maximal field spectra: Consistent self-interactions*, Proceedings of the "Physics Conference TIM-11", Timisoara, Romania, November 24-27, 2011, [AIP Conference Proceedings 1472 \(2012\) 3-11](#)
21. [E. M. Cioroianu](#), *Physical degrees of freedom in theories with massless tensor gauge fields of degree two*, Proceedings of the "Physics Conference TIM-11", Timisoara, Romania, November 24-27, 2011, [AIP Conference Proceedings 1472 \(2012\) 25-35](#)
22. C. Bizdadea, [E. M. Cioroianu](#), S. O. Saliu, S. C. Sararu, L. Stanciu-Oprean, *Consistent interaction vertices in arbitrary topological BF theories*, Proceedings of the "Physics Conference TIM-12", Timisoara, Romania, November 27-30, 2012, [AIP Conference Proceedings 1564 \(2013\) 69-77](#)
23. [E. M. Cioroianu](#), *First-order dynamics for massless tensor gauge fields of degree three*, Proceedings of the "Physics Conference TIM-12", Timisoara, Romania, November 27-30, 2012, [AIP Conference Proceedings 1564 \(2013\) 50-56](#)
24. [E. M. Cioroianu](#), *On the first-order formalisms for a massless tensor gauge field of degree  $(k+1)$* , Proceedings of the "Physics Conference TIM-14", Timisoara, Romania, November 20-22, 2014, [AIP Conference Proceedings 1694 \(2015\) 020003](#)
25. C. Bizdadea, [E. M. Cioroianu](#), S. O. Saliu, *Note on the BRST mass generation of a vector field. The case of couplings to  $N=4$  real scalars*, Proceedings of the "Physics Conference TIM15-16", Timisoara, Romania, May 26-28, 2016, [AIP Conference Proceedings 1796 \(2017\) 020003](#)
26. C. Bizdadea, [E. M. Cioroianu](#), S. O. Saliu, *Massive spin-one fields from couplings with five massless real scalars*, Proceedings of the "Physics Conference TIM-17", Timisoara, Romania, May 25-27, 2017, [AIP Conference Proceedings 1916 \(2017\) 020003](#)
27. C. Bizdadea, [E. M. Cioroianu](#), S. O. Saliu, *Vector Field Mass Generation in a Single  $D=4$  Topological BF Model*, Proceedings of the "Physics Conference TIM-18", Timisoara, Romania, May 24-26, 2018, [AIP Conference Proceedings 2071 \(2019\) 020009](#)

28. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, *Zeeman-like Effect in a Spontaneous Symmetry-Breaking Scheme*, Proceedings of the “Physics Conference TIM18”, Timisoara, Romania, May 24-26, 2018, [AIP Conference Proceedings 2071 \(2019\) 020006](#)
29. E. M. Cioroianu, *Contact Structures: From Standard to Line Bundle Approach*, Proceedings of the “Physics Conference TIM18”, Timisoara, Romania, May 24-26, 2018, [AIP Conference Proceedings 2071 \(2019\) 020006](#)
30. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, *Aspects of the spontaneous symmetry breaking in a  $SU(2) \times U(1)$ -gauge model involving six real scalar fields*, Proceedings of the “Physics Conference TIM-19”, Timisoara, Romania, May 19-31, 2019, [AIP Conference Proceedings 2218 \(2020\) 050006](#)
31. E. M. Cioroianu, *Locally Conformal Symplectic Structures: From Standard to Line Bundle Approach*, Proceedings of the “Physics Conference TIM-19”, Timisoara, Romania, May 19-31, 2019, [AIP Conference Proceedings 2218 \(2020\) 050007](#)

### Monographs, graduate textbooks, scientific books

1. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, *Irreducible and reducible BRST symmetries* (in Romanian), Universitaria Publishing House, Craiova, 2002, ISBN 973-8043-206-6
2. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, S. C. Sararu, *Interacting BF models* (in Romanian), Universitaria Publishing House, Craiova, 2007, ISBN 978-973-742-710-6
3. C. Bizdadea, E. M. Cioroianu, S. O. Saliu, C. C. Ciobirca, I. Negru, *Mixed symmetry tensor fields* (in Romanian) Universitaria Publishing House, Craiova, 2008, ISBN 978-606-510-401-3
4. E. M. Cioroianu, S. C. Sararu, *Introduction to gravity* (in Romanian), Universitaria Publishing House, Craiova, 2008, ISBN 978-606-510-393-1
5. E. M. Cioroianu, *Quantum mechanics* (in Romanian), Universitaria Publishing House, Craiova, 2015, ISBN 978-606-14-0948-8
6. C. Bizdadea, E. M. Cioroianu, I. Negru, *Analytical Mechanics – problems* (in Romanian), Reprography of the University of Craiova, 2000, 178 pp.
7. E. M. Cioroianu, M.T. Miuta, S. C. Sararu, *Newtonian Mechanics – laboratory* (in Romanian), Universitaria Publishing House, Craiova, 2015, ISBN 978-606-14-0786-6

## RESEARCH CONTRACTS

### Research grants/contracts financed within the national scientific research programs

1. *Couplings between nonlinear theories and systems of 1-, 2- and 3-forms*, Grant type: AT, Contract number/year: 33547/2003, CNCSIS code: 302/2003, Project director: E. M. Cioroianu
2. *Self-interactions in topological BF-type theories in  $D=5$* , Grant type: AT, Contract number/year: 33062/2004, CNCSIS code: 35/2004, Project director: E. M. Cioroianu
3. *Consistent interactions in supersymmetric theories*, Grant type: AT, Contract number/year: 27661/2005; GR 155/2006, CNCSIS code: 24/2005, Project director: E. M. Cioroianu

### Participation in international/ national scientific research contracts



1. *Constituents, fundamental forces and symmetries of the universe*, Contract type: FP6-Marie Curie Research Training Networks, Contract number/year: MRTN-CT-2004-005104/2004-2008, Scientist in-charge at the University of Craiova: C. Bizdadea
2. *Quantization methods in gauge theories*, Grant type: A, Contract number/year: 4636/1999, CNCSIS code: 83/1999, Project director: C. Bizdadea
3. *Lagrangian and Hamiltonian interactions in elementary particle theory*, Grant type: A, Contract number/year: 35254/2001, CNCSIS code: 140/2001, Project director: C. Bizdadea
4. *Field theories with non-linear gauge algebras*, Grant type: A, Contract number/year: 33451/2002, CNCSIS code: 943/2002, Project director: C. Bizdadea,
5. *Interactions in theories with symmetric tensors of degree two*, Grant type: A, Contract number/year: 33062/2004; 34677/2005; GR 155/2006, CNCSIS code: 305/2004, Project director: C. Bizdadea
6. *Advanced researches in quantum field theory and gravitation*, Contract type: PC-D, Contract number/year: CEx05-D11-49/2005, Scientist in-charge at the University of Craiova: C. Bizdadea
7. *Fundamental interactions and geometrodynamics*, Contract type: PC-D, Contract number/year: 2-CEx06-11-92/2006, Project director: C. Bizdadea
8. *Topological field theories*, Grant type: A, Contract number/year: 97GR/2007; 65GR/2008, CNCSIS code: 581/2007, Project director: C. Bizdadea
9. *Nonlinear Grassmannians and diffeomorphisms groups*, Contract type: PNII, Contract number/ year 120/2017, Project director: C. Vizman

#### ADDITIONAL RELEVANT INFORMATION

- Dr. Eugen-Mihaita Cioroianu has been awarded the 2008 *Serban Titeica* prize for Theoretical Physics of the National R&D Institute of Physics and Nuclear Engineering *Horia Hulubei*;
- The scientific papers published by dr. Eugen-Mihaita Cioroianu received [according with SPIRES database] **125** positive citations [excluding self-citations];
- According to Web of Science, dr. Eugen-Mihaita Cioroianu has the Hirsch index equals to **11**;
- ResearcherID: B-7762-2011, <http://www.researcherid.com/rid/B-7762-2011>.

Craiova,  
31/01/2021

Eugen-Mihăiță CIOROIANU