



Curriculum vitae Europass

Informații personale

Nume/Prenume
Adresă
Telefon
E-mail
Naționalitate
Data nașterii
Sex

Dariescu /Marina-Aura

Trc. Dimitrie Ralet nr. 8, Iasi, Romania
0742910549
marina@uaic.ro
Romana

F

Experiența profesională

Perioada

1985-1989

Funcția sau postul ocupat

Profesor de fizică

Numele și adresa angajatorului

Liceele V. Alecsandri Bacau si D. Cantemir Iasi

Tipul activității sau sectorul de activitate

Profesor de fizică

Perioada

1989-1990

Funcția sau postul ocupat

Asistent suplinitor

Numele și adresa angajatorului

Universitatea Tehnica Ghe. Asachi, Iasi

Tipul activității sau sectorul de activitate

Didactic

Perioada

1990-1993

Funcția sau postul ocupat

Asistent universitar

Numele și adresa angajatorului

Universitatea Alexandru Ioan Cuza din Iași

Tipul activității sau sectorul de activitate

Didactic

Perioada

1993-1997

Funcția sau postul ocupat

Lector universitar

Numele și adresa angajatorului

Universitatea Alexandru Ioan Cuza din Iași

Tipul activității sau sectorul de activitate

Didactic

Perioada

1997-2000

Funcția sau postul ocupat

Conferentiar universitar

Numele și adresa angajatorului

Universitatea Alexandru Ioan Cuza din Iași

Tipul activității sau sectorul de activitate

Didactic

Perioada

2000 pana in prezent

Funcția sau postul ocupat

Profesor universitar

Numele și adresa angajatorului

Universitatea Alexandru Ioan Cuza din Iași

Tipul activității sau sectorul de activitate

Didactic

Conducator de Doctorat, Universitatea Alexandru Ioan Cuza din Iași/ din 2009

Educație și formare

1969-1973: Scoala primara,
1973-1977: Gmnaziu, Liceul M. Eminescu, Iasi,
1977-1981: Liceul M. Eminescu si Liceul C. Negruzzi, Iasi,
1981-1985: Facultatea de Fizica, Universitatea Alexandru Ioan Cuza din Iași

STUDII POSTUNIVERSITARE:

Doctorat in Fizica, specializarea Fizica Teoretica, Univ. *Alexandru Ioan Cuza*, Iasi, Martie 1994
Tema Tezei: *Teorii Gauge in Fizica Particulelor Elementare*
Coordonator: Prof. univ. dr. Gheorghe Zet

Cursul postuniversitar de 2 luni, la Centrul pentru Instruire in Informatica, Iași, in cadrul
"Programului de Acreditare a operatorilor pe calculatoare personale" (1993);

Stagiu de cercetare, ca visiting researcher, 10 luni la Universitatea din Toyama, Japonia
(1995-1996);

FULBRIGHT FELLOWSHIP, University of Oregon, USA (Sept. 2002-May 2003);

Diploma on Cosmology, *First Aegean Summer School on Cosmology*, Karlovassi, **Greece**,
Sept. 2001 si la *4th Aegean Summer School: Black Holes*, Mytilene, **Greece**, sept. 2007.

Aptitudini și competențe personale

Limba(i) maternă(e)

ROMANA

Limba(i) străină(e) cunoscută(e)

Engleza, Franceza, Portugheza

Autoevaluare

Nivel european (*)

Engleza

Franceza

Înțelegere				Vorbire				Scriere	
Ascultare		Citire		Participare la conversație		Discurs oral		Exprimare scrisă	
	B2		B2		B2		B2		B2
	B2		B2		B2		B1		B1

(*) [Nivelul Cadrului European Comun de Referință Pentru Limbi Străine](#)

Competențe și aptitudini organizatorice

In the Organizer Committee si Scientific Committee la Conferinte internationale si nationale (selectie)

First Tah Poe School on Cosmology, Tailanda, aprilie, 2002.

International Conference on Relativity, ICR-2005, Amravati University, Amravati, India, ianuarie, 2005.

Conferinta nationala de Fizica Teoretica, Universitatea Alexandru Ioan Cuza, Iasi, Iunie 2010.

ACTIVITATE DIDACTICA UNIVERSITARA:

Ore de laborator si/sau seminar la disciplinele:

Mecanica analitica si a mediilor deformabile (Fizica II), Electrodinamica si teoria relativitatii (Fizica II si III), Mecanica cuantica (Fizica III), Metode matematice ale fizicii teoretice (Fizica III), Metoda integralei functionale (Fizica III), Teoria particulelor elementare (Fizica V), Neliniaritati in solide (Fizica VI), Statistica cuantica (Fizica Tehnologica III), Fizica teoretica (Matematica V), Fizica teoretica (Chimie-Fizica IV) si Fizica generala (studenti straini).

Ore de curs la disciplinele:

Limbaje de programare (F), Statistica cuantica (FT), Fizica teoretica (Matematica), Fizica teoretica (Chimie-Fizica), Metoda integralei functionale (F, curs facultativ), Cromodinamica Cuantica (F, curs optional), Capitole Speciale de Fizica Teoretica (FT), Capitole Speciale de Fizica Cuantica (FM, BF) Mecanica Cuantica (F, FT, FI, BF, FM), Termofinamica si fizica statistica (F, FT); Astrofizica si Cosmologie (F, curs optioal);

Cursuri la Master:

Fizica energiilor inalte si elemente de astrofizica (Master: Fizica Teoretica)

Metode matematice ale fizicii teoretice (Master: Fizica Teoretica)

Teorii care au influentat gandirea in fizica fundamentala si aplicata (Master Didactica Fizicii)

Statistica starilor de neechilibru (Master II, sem. II, doar in anul univ. 2005-2006)

Teorii cuantice ale starii condensate (Master: Materiale avansate. Nanotehnologii si Modelare si simulare);

Cursuri la **Scoala Doctorala**: Teorii cuantice de camp, Fizica teoretica

Rezultatele activitatii stiintifice

7 monografii, capitole in 5 carti de editor (nationale si international), 14 granturi de cercetare, 114 articole ISI, 56 articole in reviste non-ISI cu referenti, 27 prelegeri in conferinte internationale si 15 in conferinte nationale. **(Vezi Anexa)**

Premiul **Constantin Miculescu**, acordat de *Academia Romana*, pentru lucrarile publicate in 2011 (in colaborare cu Ciprian Dariescu), asupra *Teoriei campului gravitational in modele cu extra-dimensiuni si Moduri cuantice exacte in campuri extreme*, Decembrie 2013.

Informații suplimentare

Premiul **Constantin Miculescu**, acordat de *Academia Romana*, pentru lucrarile publicate in 2011 (in colaborare cu Ciprian Dariescu), asupra *Teoriei campului gravitacional in modele cu extra-dimensiuni si Moduri cuantice exacte in campuri extreme*, Decembrie 2013.

Bursa FULBRIGHT la Institut of Theoretical Science, Univ. of Oregon, Eugene, USA, Septembrie 2002-mai 2003.

Directii de cercetare:

Teorii gauge in fizica particulelor elementare

Gravitație și cosmologie

Fizica Gaurilor Negre

Efecte speciale în teorii moderne de cuantificare

Prelegeri cu statut de **Invited Plenary Report** la (selectie):

The VI-th Friedmann International Seminar on Gravitation and Cosmology, Cargese, France, iulie 2004.

International Conference on Relativity, ICR-2005, Amravati, India, ianuarie 2005.

International Symposium Mathematical Methods in Engineering, MME06, Cankaya University, Ankara, Aprilie 2006.

The VII-th Friedmann International Seminar on Gravitation and Cosmology, Joao Pessoa, Brazil, iunie-iulie 2008.

The 5TH AUSTRALASIAN CONFERENCE ON GENERAL RELATIVITY AND GRAVITATION, University of Canterbury, Christchurch, New Zealand, Dec. 2009.

6th Bangkok Workshop on High-Energy Theory

Physics Department of Chulalongkorn University, Bangkok, Thailand, Ianuarie 2017.

International Symposium in High Energy Physics, Antalya, **Turkey**, Octombrie 2024

Seminarii sustinute la Universitati din strainatate (selectie):

Pe teme de fizica energiilor inalte si gravitatie:

Institute of Theoretical Physics, Friedrich-Schiller Univ., Jena, Germany

Institute of Theoretical Physics, Dortmund University, Germany,

Institute of Information Sciences and Electronics, Tsukuba Univ., Japan,

High Energy Physics Dept., Univ. of Hawaii, Honolulu, USA,

La Plata National University, Argentina,

Buenos Aires University si IAFE, Argentina,

UFPB, Brazilia.

Conventie de colaborare bilaterala cu *Canakkale Onsekiz Mart University*, programul ERASMUS.

Conventie de colaborare bilaterala cu *Helsinki University*, programul ERASMUS.

International Scientific Contract with the Institute of Theoretical Physics,

Friedrich-Schiller University, Jena, Germany, on **Exakte Losungen fur**

Axialsymmetrisch Stationare Felder im Rahmen der Allgemeinen Relativitatstheorie und der Riemann-Cartan Theorie, November 1991 - November 1996.

Membru al Societatilor Stiintifice:

Tensor Society (Japan)

European Physical Society

Romanian Physical Society

Romanian Society on General Relativity and Gravitation

Carti publicate:

1. FUNDAMENTAREA MECANICII CUANTICE,
Ioan Gottlieb, Ciprian Dariescu, Marina-Aura Dariescu
Editura "TEHNICA", Chişinău (1997) 568 pagini, ISBN 5-7790-01-55-3
2. GRAVITAŢIE ŞI CÂMPURI ÎN UNIVERSUL EINSTEIN
Ciprian Dariescu, Marina-Aura Dariescu
Editura "VESPER", Iaşi (1997) 201 pagini, ISBN 973-96589-6-2
3. CÂMPURI CUANTICE LIBERE
Ciprian Dariescu, Marina-Aura Dariescu, Ioan Gottlieb
Editura "BIT", Iaşi (1998) 582 pagini, ISBN 973-9327-29-x
4. MECANICĂ CUANTICĂ
Ioan Gottlieb, Marina-Aura Dariescu, Ciprian Dariescu
Editura "BIT", Iaşi (1999) 310 pagini, ISBN 973-9327-33-8.
5. CAPITOLE DE BAZĂ ÎN MECANICA CUANTICĂ. MICROPARTICULE ŞI CÂMPURI
Ciprian Dariescu, Marina-Aura Dariescu, Ioan Gottlieb
Editura "Venus", Iaşi (2007) 400 pagini, ISBN 978-973-756-061-2
6. MODELE SPECIALE DE UNIVERS ŞI PATOLOGII SPAŢIO-TEMPORALE
Iordana Aştefănoaei, Ciprian Dariescu, Marina-Aura Dariescu
Editura Univ. Al. I. Cuza, Iaşi (2007) 230 pagini, ISBN 973-703-205-5 (978-973-703-205-8).
7. TOPICI DE ASTRONOMIE, ASTROFIZICĂ ŞI COSMOLOGIE PENTRU ÎNCEPĂTORI,
Marina-Aura Dariescu, Ciprian Dariescu, Lucian-Mihai Cosovanu, Cristian-Ionut Stelea
Editura Ars Longa, Iaşi (2015) 200 pagini, ISBN 978-973-148-200-2.

Capitole in carti Internationale

On the Quantization of the Complex Scalar Fields in $S^3 \times R$ Space-Time

C. Dariescu and M. A. Dariescu

In *Lagrange and Finsler Geometry: Applications to Physics and Biology*, Springer, 1996,

Edited by P.L. Antonelli and R. Miron,

ISBN 978-90-481-4656-7, ISBN 978-94-015-8650-4 (eBook)

DOI 10.1007/978-94-015-8650-4, pgs. 233-240.

Basic General Relativity, 150 pagini, Proceedings of First Tah Poe School on Cosmology, Naresuan University, Pithanulok, Thailand, 2002.

Proiecte de cercetare-dezvoltare-inovare pe baza de contract-grant

- 1) Studiul campului gravitacional utilizand Formalismul Tetradic Null-Complex fara Torsiune
Contract 90/1989 (Faza 2.1, 1989) cu Inst. de Gravitate si Stiinte Spatiale, Bucuresti;
- 2) Studiul campului gravitacional utilizand Formalismul Tetradic Null-Complex cu Torsiune
Contract 90/1989 (Faza 2.2, 1990) cu Inst. de Gravitate si Stiinte Spatiale, Bucuresti;
- 3) Teorii ale gravitatiei pe spatii cu topologie $S^3 \times R$
Contract 4/1991 (Faza 1.2, 1991) cu Inst. de Gravitate si Stiinte Spatiale, Bucuresti;
- 4) Teorii extinse ale gravitatiei pe spatii Riemann-Cartan
Contract 4/1991 (Faza 2.2, 1992) cu Inst. de Gravitate si Stiinte Spatiale, Bucuresti;
- 5) Teorii gauge cu aplicatii in astrofizica si cosmologie
Contract 15/1994 cu Ministerul Cercetarii si Tehnologiei, Bucuresti;
- 6) Metode de cuantificare neperturbativa a Universului Robertson-Walker spatial plat cu constanta cosmologica pozitiva, in imagine Heisenberg, cu aplicatii la sectorul stationar al Universului de Sitter
Contract 42/1996 cu Inst. de Gravitate si Stiinte Spatiale, Bucuresti;
- 7) Contributii la studiul modelelor spatio-temporale cu simetrii speciale, cu aplicatii la surse scalare si interactiuni gauge pe structuri patologice globale
Contract 43/1996 cu Ministerul Cercetarii si Tehnologiei, Bucuresti
- 8) Studiul teoretic si aplicativ al fenomenelor neliniare
Grant international (Banca Mondiala si Guvernul Romaniei). Cod CNCSU: 39/1998.
- 9) Simulator cuantic pentru dispozitive semiconductoare nanometrice,
Proiect CEEX – QUANET (2005-2008).
- 10) Campuri cuantice si solutii exacte ale ecuatiilor Einstein cu aplicatii in astrofizica si cosmologie.
Grant tip A, COD CNCSIS 1160/2006-2008.
- 11) Dinamica unitara a campurilor cuantice si de meso-scala (Director Grant).
Grant tip A, COD CNCSIS 1433/2007.
- 12) Platforma integrata pentru studii avansate in nanotehnologii moleculare (AMON),
Proiect CNCSIS tip Platforme de cercetare (2006-2008).
- 13) Dezvoltarea de noi concepte, tehnici si abilitati bazate pe metode sinergice de evaluare neinvaziva a materialelor noi si avansate, a materialelor micro si nanostructurate, estimari de ciclu de viata a structurilor realizate de acestea (SINERMAT)
Proiect CEEX – SINERMAT (2005-2008).
- 14) Mathieu and Heun functions in quantum field dynamics (MHFQFD). (Director Grant)
Grant PN-III-P4-ID-PCE-2016-0131 (2017-2019)

I. Articole publicate în reviste cotate ISI

1. **U(1) Gauge Theory for Charged Bosonic Fields on $R \times S^3$ Topology**
C. Dariescu and M.A. Dariescu
Foundations of Physics, **21**, No. 11, p. 1323-1327 (1991).
2. **U(1) Gauge Theory of the Quantum Hall Effect**
C. Dariescu and M.A. Dariescu
Foundations of Physics, **21**, No. 11, p. 1329-1333 (1991).
3. **The SU(2) x U(1) Gauge Theory of Bosonic and Fermionic Fields in $S^3 \times R$ Space-Time**
C. Dariescu and M.A. Dariescu
Foundations of Physics, **24**, No. 11, p. 1577-1582 (1994).
4. **Gauge Theory of Fermions on $S^3 \times R$ Spacetime**
M.A. Dariescu, C. Dariescu and I. Gottlieb
Foundations of Physics, **25**, No. 6, p. 957-961 (1995).
5. **Fermions in a Kerr-Newman Spacetime**
M.A. Dariescu, C. Dariescu and I. Gottlieb
Foundations of Physics, **25**, No. 10, p. 1523-1528 (1995).
6. **A Special Lagrange Metric in Particle Mechanics**
M. Agop, C. Dariescu, M.A. Dariescu and D. Tatomir
Il Nuovo Cimento, **110B**, No. 4, p. 371-375 (1995).
7. **Perturbative QCD Estimation of the $B \rightarrow K^* + \gamma$ Branching Ratio**
M.A. Dariescu and C. Dariescu
Physics Letters B, **367**, No. 1-4, p. 349-352 (1996).
8. **Perturbative QCD analyses of the nonleptonic B meson decays**
C. Dariescu and M.A. Dariescu
Physics Letters B, **378**, No. 1-4, p. 323-328 (1996).
9. **Quantizing de Sitter Spacetime in Heisenberg Picture**
C. Dariescu, S. Hamamoto and M.A. Dariescu
Progress of Theoretical Physics, **95**, No. 6, p. 1199-1210 (1996).
10. **A Heavy-to-heavy Approach of $B \rightarrow K^* \gamma$ via Perturbative QCD**
C. Dariescu and M.A. Dariescu
Physics Letters B, **398**, No. 4, p. 361-364 (1997).
11. **Non-Inertial First Order Transition Amplitude for $1/2$ - Spin Fermions in Almost Uniformly Accelerated Frames**
C. Dariescu and M.A. Dariescu
Il Nuovo Cimento, **113B**, No. 2, p. 207-212 (1998).
12. **Zero Energy Modes of Massless Fermions in $S^3 \times R$ Spacetime**
C. Dariescu and M.A. Dariescu
Foundations of Physics, **28**, No. 8, p. 1393-1396 (1998).
13. **Rotationally Symmetric Massless Modes in Closed Robertson-Walker Universe**
C. Dariescu and M.A. Dariescu
Foundations of Physics Letters, **12**, No. 3, p. 267-279 (1999).
14. **A Maxwell Field Equations Class of Exact Solutions on Matter Dominated Spatially Closed Friedman-Robertson-Walker Universe**
M.A. Dariescu and C. Dariescu
Foundations of Physics Letters, **12**, No. 4, p. 383-391 (1999).
15. **Non-Leptonic B Meson Decays using Perturbative QCD**
M.A. Dariescu and C. Dariescu
Australian Journal of Physics, **52**, No. 6, p. 949-954 (1999).
16. **Large Scale Pathology of Universes with $V_{II_0} \times VIII$ Isometries**
C. Dariescu and M.A. Dariescu
Foundations of Physics Letters, **13**, No. 4, p. 147-166, (2000).
17. **Magnetic Fields in Spaces with $V_{II_0} \times VIII$ Isometries**
C. Dariescu and M.A. Dariescu
Australian Journal of Physics, **53**, No. 3, p. 345-353 (2000).
18. **Wess-Zumino Currents on $S^3 \times R$ Spacetime**
M.A. Dariescu and C. Dariescu
Foundations of Physics Letters, **15**, No. 1, p. 85-94 (2001).
19. **Large Scale Pathology and Gravitomagnetic Resonances in Static $V_{II_0} \times VIII$ Spacetimes with Mixed Matter-Sources**
C. Dariescu and M.A. Dariescu
International Journal of Modern Physics A, **16**, No. 22, p. 3707-3716 (2001).
20. **Quantum Flux-based Resonances in Solitonic Vortices**
M.A. Dariescu and C. Dariescu
Chaos, Solitons and Fractals, **13**, No. 9, p. 1851-1855 (2002).
21. **SU(N) Supersymmetry on $S^3 \times R$ Spacetime**
M.A. Dariescu and C. Dariescu
Foundations of Physics Letters, **15**, No. 3, p. 277-286 (2002).

22. **First-Order Perturbative Approach to Charged Boson Stars**
M.A. Dariescu and C. Dariescu
 Physics Letters B, **548**, Nos. 1-2, p. 24-28 (2002).
23. **Transition Rates in Charged Boson Nebulae**
C. Dariescu and M.A. Dariescu
 Physics Letters B, **566**, Nos. 1-2, p. 19-26 (2003).
24. **Vacuum Electromagnetic Modes in Friedman-Robertson-Walker Universe**
C. Dariescu and M.A. Dariescu
 International Journal of Modern Physics A, **18**, No. 31, p. 5725-5732 (2003).
25. **CP-violating rate difference relations for $B \rightarrow PP$ and $B \rightarrow PV$ in broken $SU(3)$**
M.A. Dariescu, N.G. Deshpande, X.-G. He and G. Valencia
 Physics Letters B, **557**, p. 60-68 (2003).
26. **Alternative Approach to $B \rightarrow \eta'$ K-Branching Ratio Calculation**
M.A. Dariescu and C. Dariescu
 Eur. Phys. J. C, **36**, No. 2, p. 215-220 (2004).
27. **CP Violating SUSY effects in penguin dominated modes $B \rightarrow K \Phi$ and $B \rightarrow K \Phi^*$**
C. Dariescu, M.A. Dariescu, N.G. Deshpande and D.K. Ghosh
 Phys. Rev. **D69**:112003 (2004).
28. **Quantized Planary Dynamics in Orthogonal Magneto-electrostatic Fields**
M.A. Dariescu and C. Dariescu
 Chaos, Solitons and Fractals, **23**, No. 3, p. 1005-1011 (2005).
29. **Transition and Regeneration Rates in Charged Boson Stars via Perturbative Calculations**
C. Dariescu and M.A. Dariescu
 International Journal of Modern Physics A, **20**, No. 11, p. 2326-2330 (2005).
30. **Scalar and Electromagnetic Configurations in $k=1$ Friedmann-Robertson-Walker Universes**
M.A. Dariescu and C. Dariescu
 International Journal of Modern Physics A, **20**, No. 11, p. 2510-2514 (2005).
31. **Topological quantum dynamics of charged bosons**
M.A. Dariescu, C. Dariescu and G. Murariu
 Chaos, Solitons and Fractals, **28**, No. 1, p. 1-7 (2006).
32. **Gravitoelectromagnetically induced transitions in charged boson nebulae**
M. A. Dariescu, C. Dariescu and G. Murariu
 Europhysics Letters, **74**, No. 6, p. 978-984 (2006).
33. **TE-Compatible Maxwell fields in spatially closed Friedman-Robertson-Walker Universe**
C. Dariescu and M. A. Dariescu
 Chaos, Solitons and Fractals, **32**, No. 1, p. 8-14 (2007).
34. **Finite temperature analysis of quantum Hall-type behavior of charged bosons**
M. A. Dariescu and C. Dariescu
 Chaos, Solitons and Fractals, **33**, No.3, p. 776-781 (2007).
35. **The Mesoscopic Nonlinear Electro-Quantum Origin of the Langmuir Law**
C. Dariescu and M. A. Dariescu
 Chaos, Solitons and Fractals, **34**, No. 3, p. 955-965 (2007).
36. **TE Modes in Einstein's Universe**
C. Dariescu, M. A. Dariescu and G. Murariu
 Chaos, Solitons and Fractals, **34**, No. 4, p. 1030-1036 (2007).
37. **Persistent currents and critical magnetic field in planar dynamics of charged bosons**
M. A. Dariescu and C. Dariescu
 J. Phys.: Condens Matter, **19**, No. 25 (2007) 256203.
38. **From Nucleation to Inflation—A Better Timing**
C. Dariescu and M.A. Dariescu
 International Journal of Nonlinear Science and Numerical Simulation, **9**, No. 1, p. 1-8 (2008).
39. **MAPLE Routines for Bosons on Curved Manifolds**
G. Murariu, C. Dariescu, M.A. Dariescu
 Rom. J. of Physics, **53**, No. 1-2, p. 99-108 (2008).
40. **$SO(3,1)$ -Invariant Approach to Dipole Radiation**
C. Dariescu and M.A. Dariescu
 International J. of Theoretical Physics, **47**, No. 10, p. 2523-2532 (2008).
41. **Semiclassical Analytic Estimation of Charged Boson Nebulae Mass and the Gravitationally Radiated Flux**
C. Dariescu and M.A. Dariescu
 Astroparticle Physics, **29**, No. 5, p. 331-335 (2008).
42. **A WKB Approach to Quantum Hall States**
M.A. Dariescu and C. Dariescu
 Chaos, Solitons and Fractals, **38**, No. 5, p. 1292-1297 (2008).
43. **Fermions on Spacetimes of Spatially Closed Hypersurfaces**
M.A. Dariescu and C. Dariescu
 Chaos, Solitons and Fractals, **39**, No. 5, p. 2522-2529 (2009).
44. **Coherently Perturbed Milne Universe**
C. Dariescu and M.A. Dariescu
 Chaos, Solitons and Fractals, **40**, No. 5, p. 2294-2304 (2009).
45. **The Axially Symmetric p-Modes of Maxwell Radiation in Milne Spacetime**
C. Dariescu and M.A. Dariescu
 Astroparticle Physics, **31**, No. 1, p. 46-51 (2009).

46. **Vertical Dipole Radiation in Milne Universe**
C. Dariescu and M. A. Dariescu
International Journal of Modern Physics A, **24**, No. 8-9, p. 1533-1536 (2009).
47. **Quantum Thermodynamics of Massless Bosons in Universes with VII₀ x VIII Isometries**
M.A. Dariescu, C. Dariescu and A. C. Pirghie
International Journal of Modern Physics A, **24**, No. 8-9, p. 1574-1577 (2009).
48. **Mass Spectrum in 5D Warped Einstein Universe and El Naschie's Quantum Golden Field Theory**
M. A. Dariescu, C. Dariescu and A. C. Pirghie
Chaos, Solitons and Fractals, **42**, No. 1, p. 247-252 (2009).
49. **Natural Brane-Confinement from Massive Z₂-Spontaneously Broken Kaluza-Klein Excitations in the Bulk**
M.A. Dariescu, C. Dariescu and C. Romero
Central European Physical Journal, **7**, No. 4, p. 690-695 (2009).
50. **Thermodynamics of Bosons in an Universe with Global Pathology**
M. A. Dariescu, C. Dariescu and A. C. Pirghie
Romanian Reports in Physics, **61**, No. 3, p. 417-426 (2009).
51. **Boson Nebulae Charge**
C. Dariescu and M. A. Dariescu
Chinese Physics Letters, **27**, No. 1, 011101 (2010).
52. **Hawking-de Sitter Thermalization of Quasi-Minkowskian Massless Sclaron Production, Energy Density Content and Back-Reaction**
A.C. Pirghie, C. Dariescu and M. A. Dariescu
International J. of Theoretical Physics, **49**, No. 1, p. 98-109 (2010).
53. **Software approaching of quantized planary dynamics of charged bosons**
G. Murariu, A. M. Dariescu and C. Dariescu
JOAM, **12**, No. 4, p. 927- 932 (2010).
54. **5-Dimensional Toy Model for Particle Confinement in Spatially-Warped Einstein Universe**
M.A. Dariescu and C. Dariescu
Modern PhysicsLetters A, **25**, No. 24, p. 2051-2063 (2010).
55. **Robertson-Walker Branes with Massless Scalars and Cosmological Term**
M. A. Dariescu and C. Dariescu
Astroparticle Physics, **34**, No. 2, p. 116-120 (2010).
56. **Allowed Mass Spectrum for Scalars on Einstein Branes in Five Dimensions**
M. A. Dariescu, C. Dariescu and M. Răuț
Rom. J. of Physics, **55**, No. 9-10, p. 970-978 (2010).
57. **Charged black strings with arbitrary tension in six dimensions**
C. Stelea, C. Dariescu and M. A. Dariescu
Rom. J. of Physics, **55**, No. 9-10, p. 1131-1140 (2010).
58. **Charged Scalars in Transient Stellar Electromagnetic Fields**
M.A. Dariescu, C. Dariescu and O. Buhucianu
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Prof. univ. dr. Marina-Aura Dariescu