Curriculum vitae Europass

Informaţii personale

Nume/Prenume
Dariescu /Marina-Aura
Adresă: Str. Sf. Lazar nr. 33, Bl. D1, Et. II, Ap. 8, Iasi, Romania
Telefon: 0232201050

E-mail: marina@uaic.ro
Naţionalitate: Romana

Sex: F

Experienţa profesională

Perioada	1985-1989
Funcţia sau postul ocupat	Profesor de fizică
Numele şi adresa angajatorului	Liceele V. Alecsandri Bacau si D. Cantemir Iasi
Tipul activităţii sau sectorul de activitate	Profesor de fizică
Perioada	1989-1990
Funcţia sau postul ocupat	Asistent suplinitor
Numele şi adresa angajatorului	Universitatea Tehnica Ghe. Asachi, Iasi
Tipul activităţii sau sectorul de activitate	Didactic
Perioada	1990-1993
Funcţia sau postul ocupat	Asistent universitar
Numele şi adresa angajatoru	Universitatea Alexandru Ioan Cuza din Iaşi
Tipul activităţii sau sectorul de activitate	Didactic
Perioada	1993-1997
Funcţia sau postul ocupat	Lector universitar
Numele şi adresa angajatoruui	Universitatea Alexandru Ioan Cuza din Iaşi
Tipul activităţii sau sectorul de activitate	Didactic
Perioada	1997-2000
Funcţia sau postul ocupat	Conferentiar universitar
Numele şi adresa angajatoru	Universitatea Alexandru Ioan Cuza din Iaşi
Tipul activităţii sau sectorul de activitate	Didactic
Perioada	2000 pana in prezent
Funcţia sau postul ocupat	Profesor universitar
Numele şi adresa angajatorului	Universitatea Alexandru Ioan Cuza din Iaşi

Tipul activităţii sau sectorul de activitate	Didactic

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

Educaţieşi 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 Iaşi

STUDII POSTUNIVERSITARE:

Doctorat in Fizica, specializarea Fizica Teoretica, Universitatea *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, Iaşi, 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 şicompetenţe personale

Limba(i) maternă(e)	**ROMANA**

Limba(i) străină(e) cunoscută(e) **Engleza, Franceza**

Autoevaluare

Nivel european (*)

Înţelegere		Vorbire		Scriere
Ascultare	Citire	Participare la conversaţie	Discurs oral	Exprimare scrisă

Engleza		B2		B2		B2		B2		B2

(*) Nivelul Cadrului European Comun de Referinţă Pentru Limbi Străine

Competenţeşi aptitudini organizatorice

In theOrganizerCommittee si ScientificCommittee la Conferinteinternationale si nationale (selectie)
FirstTah 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.

Activitati de predare	**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, 105 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.

Informaţii suplimentare	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.

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

Domenii de competenta:

Teorii gauge in fizica particulelor elementare
Gravitaţie şi cosmologie
Efecte speciale în teorii moderne de cuantificare

Prelegeri cu statut de **Invited Plenary Report** la:

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.

Prezentare orala la *6th Bangkok Workshop on High-Energy Theory*
Physics Department of Chulalongkorn University, Bangkok, Thailand, Ianuarie 2017.

Seminarii sustinute la Universitati din strainatate (selectie):
Pe teme de fizica energiilor inalte si gravitatie:
Institute of TheoreticalPhysics, Friedrich-Schiller Univ., Jena, Germany
Institute of TheoreticalPhysics, Dortmund University, Germany,
Institute of Information Sciencesand 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 withthe Institute of Theoretical Physics,
        Friedrich-Schiller University, Jena, Germany, on **Exacte Losungen fur Axialsymmetrisch Stationare Felder im Rahmen der Allgemeinen Relativitatstheorie und der Riemann-Cartan Theorie,** November 1991 - November 1996.

Membru al SocietatilorStiintifice:

        Tensor Society (Japan)
        European Physical Society
        Romanian Physical Society
        Romanian Society on General Relativity and Gravitation

Anexe

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, Iasi (2015) 200 pagini, ISBN 978-973-148-200-2.

Capitole in carti Internationale
On the Quantization of the Complex Scalar Fields in S3 x R Space-Time
C. Dariescuand 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 10.1007/978-94-015-86.50-4, 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 gravitational utilizand Formalismul Tetradic Null-Complex fara Torsiune
   Contract 90/1989 (Faza 2.1, 1989) cu Inst. de Gravitatie si Stiinte Spatiale, Bucuresti;
2) Studiul campului gravitational utilizand Formalismul Tetradic Null-Complex cu Torsiune
   Contract 90/1989 (Faza 2.2, 1990) cu Inst. de Gravitatie si Stiinte Spatiale, Bucuresti;
3) Teorii ale gravitatiei pe spatii cu topologie S3 x R
   Contract 4/1991 (Faza 1.2, 1991) cu Inst. de Gravitatie si Stiinte Spatiale, Bucuresti;
4) Teorii extinse ale gravitatiei pe spatii Riemann-Cartan
   Contract 4/1991 (Faza 2.2, 1992) cu Inst. de Gravitatie 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 Gravitatie si Stiinte Spatiale, Bucuresti;
7) Contributii la studiul modelelor spatio-temporale cu simetrii speciale, cu aplicatii la surse scalare si
interactiuni gauge pe structuri patologic 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 tipPlatforme 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. Articolepublicateînrevistecotate ISI

I. Articole publicate în reviste cotate ISI

1. U(1) GaugeTheory for ChargedBosonicFields on R x S^3Topology
C. Dariescu and M.A. Dariescu
Foundations of Physics, **21,** No. 11, p. 1323-1327 (1991).

2. **U(1) GaugeTheory of the Quantum HallEffect**
C. Dariescu and M.A. Dariescu
Foundations of Physics, **21**, No. 11, p. 1329-1333 (1991).

3. **The SU(2) x U(1) GaugeTheory of BosonicandFermionicFields in S^3 x R Space-Time**
C. Dariescu and M.A. Dariescu
Foundations of Physics, **24**, No. 11, p. 1577-1582 (1994).

4. **GaugeTheory of Fermions on S^3 x 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 -> K* + γBranchingRatio**
M.A. Dariescu and C. Dariescu
PhysicsLetters 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 -> K* γ 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 MasslessFermions in S^3xR 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 PhysicsLetters, **12**, No. 3, p. 267-279 (1999).

14. **A Maxwell Field EquationsClass 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 VII_0 x 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 VII_0 x 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^3xR 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 VII_0 x 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-basedResonances in SolitonicVortices**
M.A. Dariescu and C. Dariescu
Chaos, Solitons and Fractals, **13**, No. 9, p. 1851-1855 (2002).

21. **SU(N) Supersymmetry on S^3 x 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 -> PP and B -> 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 Approachto B⁻→η' 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 -> K Φand B -> K Φ***
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 temperatureanalysis 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 chargedbosons**
M. A. Dariescu and C. Dariescu
J. Phys.: Condens Matter, **19** , No. 25 (2007) 256203.

38. **From Nucleation to Inflation–A BetterTiming**
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 VII$_0$ 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. Pîrghie
    Chaos, Solitons and Fractals, **42**, No. 1, p. 247-252 (2009).

49. **Natural Brane-Confinement from Massive Z_2-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. Pîrghie
    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 Scalaron Production, Energy Density Content and Back-Reaction**
    A.C. Pîrghie, 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. Răuţ
    Rom. J. of Physics, **55**, No. 9-10, p. 970-978 (2010).

57. **Charged black strings with arbitrary tension in sixdimensions**
    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
    Chinese Physics Letters, **28**, No. 1, 010303 (2011).

59. **A Toy Model for Scalars in Transient Magnetic Fields**
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