Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)	**Radu Dan Constantinescu**
Address(es)	64 Imparatul Traian, 200 560 Craiova, Romania
Telephone(s)	+40 251 415077 Mobile: +40 744 345462
Fax(es)	+40 251 415077
E-mail	rconsta@central.ucv.ro, rconsta@yahoo.com
Nationality	Romanian
Date of birth	17.10 1955
Gender	male

Occupational field

Higher education

Work experience

Dates	Add separate entries for each relevant post occupied, starting from the most recent. (remove if not relevant, see instructions)
Occupation or position held	01/09/1979 - 15/02/1990
Main activities and responsibilities	Teacher of Physics
Name and address of employer	Teaching Physics Lic. „Gh.Lazar" Bucuresti / Liceul Militar Craiova / Colegiul „Carol I" Craiova
Dates	15/02/1990 - present
Occupation or position held	Assistant, Associated Professor, Professor
Main activities and responsibilities	Teaching Physics
Name and address of employer	University of Craiova, 13 A.I.Cuza, 200 585 Craiova, Romania

Education and Training

Period	1975-1979
Title of qualification awarded	Diplomat in Physics
Principal subjects/occupational skills covered	Teaching and research
Name and type of organisation providing education and training	University of Craiova
Level of qualification	7
Period	1992 - 1997
Title of qualification awarded	PhD

Principal subjects/occupational skills covered	Physics
Name and type of organisation providing education and training	Universitatea din Craiova
Level in national or international classification	8
Mother tongue(s)	Romanian

Other language(s)

Self-assessment	Understanding		Speaking		Writing
European level (*)	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C1	C1	C2	C2
French	C2	C2	C2	C2	C1

(*) Common European Framework of Reference for Languages

Social skills and competences

Organizational skills and competences

Technical skills and competences

Computer skills and competences

Additional information

Membership of professional bodies

- General Secretary of the Romanian Physical Society.
- Expert of European Commission for higher education. Bologna promoter for Romania.
- President of UNESCO South-Eastern European Network for Mathematical and Theoretical Physics (SEENET MTP) –network with universities and research institutes from 10 SE European countries
- Vicerector of University of Craiova (2005-2008) and dean of the Faculty of Physics (2008-2011).
- Coordinator of EU programs as Tempus, Erasmus, Grundtvig sau Comenius.
- Referee at *Mathematical Reviews* (USA) and at *Central European Journal of Physics*.
- Member of IEEE. And of Mathematical Society from USA

Publications

- Papers in ISI Journals or indexed in International Databases: 40
- Invited lectures in International conferences: 14
- Papers in Proceedings of international conferences non-indexed in databases:2
- Papers published in Romanian journals recognized by CNCS: 23
- Other scientific studies and papers: 22
- Books: 6
- Researcher profile: http://www.researcherid.com/rid/B-8694-2012

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Annexes List of publications and Citation Report from Web of Sciences

RADU CONSTANTINESCU
Dept. of Theoretical Physics
University of Craiova, Romania

LIST
Of selected scientific papers

1) G.Barnich, **R.Constantinescu**, Ph.Gregoire - The BRST-antiBRST antifield formalism: the example of the Freedman-Townsend model, Phys.Lett.B 293 (1994) 353-360.

2) **R.Constantinescu** - The Generalized Koszul Differential in the BRST Quantization, J.Math.Phys. 38(1997) 2786-2794.

3) **R.Constantinescu**, L.Tatar - Hamiltonian Sp(3) BRST symmetry: existence theorems, Phys. Lett.B417 (1998) 269-274.

4)**R. Constantinescu**, C. Ionescu, The sp(3) BRST symmetry for reducible dynamical systems, Mod. Phys. Lett. A 15, No.16 (2000)

5) D.Constantinescu, **R. Constantinescu** – "Transport barriers and diffusion phenomena for the magnetic field lines in Tokamak", Physica Scripta, Vol. T118 (2005) 244-250

6) **R.Constantinescu**, C.Ionescu: "The Equivalence between the Lagrangean and theHamiltonian formalisms for the extended BRST Symmetry", International Journal of Modern Physics A , Vol. 21, No. 7 (2006) 1567-1575

7) R.Cimpoiasu, **R.Constantinescu**: "Lie Symmetries for Yang-Mills mechanical model. Methodological approach", Inter. Journal of Theoretical Physics, Vol.45, No.9 (2006), 1769-1782.

8) **R.Constantinescu,** C. Ionescu: "From the Hamiltonian to the Lagrangean formalism for 1-reducible theories. The Freedman-Townsend model", Central European Journal of Phys, Vol. 4(2006) 511-521.

9) **R.Constantinescu,** C. Ionescu: "Multidifferential complexes and their application to gauge theories", International Journal of Modern Physics A, Vol. 21, No. 32 (2006) 6629-6640

10) R.Cimpoiasu, **R.Constantinescu**: "Lie Symmetries and Invariants for 2D Nonlinear Heat Equation", Nonlinear Analysis Series A: Theory, Methods & Applications.

11)**R.Constantinescu** , C. Ionescu**,** A Chern-Simons gauge-fixed Lagrangian in a "non-canonical" BRST approach, J. Phys. A: Math. Gen, Vol. **42** (2009) 085401 (9pp)

12) **R.Constantinescu** , C. Ionescu , The Yang-Mills model: from gauge theory to the mechanical model, Central European Journal of Physics, Vol. **7 (4)** (2009) 711 – 720

13) R.Cimpoiasu, **R.Constantinescu**: "The inverse symmetry problem for a 2D generalized second order evolutionary equation", Nonlinear Analysis Series A: Theory, Methods & Applications, vol 73, no.1 (2010) 147-154.

PERSONAL INFORMATION

Ovidiu VADUVESCU

167, La Polvacera, Brena Baja, La Palma, Prov. Santa Cruz de Tenerife, 39711, Spain

SKYPE/YM ovidiu.vaduvescu

Sex MALE| Date of birth 04/05/1967 | Nationality Romanian , Canadian

JOB APPLIED FOR

Romanian collaboration research contract (part-time)

WORK EXPERIENCE

2009-2016

Support Astronomer

Isaac Newton Group (ING: UK+NL+SP), La Palma, Canary Islands Spain

▪ Support observations, development, manage studentship program, personal research

Research

2007-2009

Postdoc Fellow Astronomer and Associate Professor

Universidad Catolica del Norte, Institute of Astronomy, Antofagasta, Chile

▪ Personal research, observations, teaching, public outreach

Research and university education

2006

Postdoc Fellow Astronomer

University of Kwazulu-Natal, Astrophysics and Cosmology a Unit, Durban, South Africa

▪ Personal research, observations, some training

Research and university education

2000-2005

Research and Teaching Assistant

York University, Department pf Physics and Astronomy, Toronto, Ontario, Canada

▪ Astronomy personal research, observations, teaching and marking lab classes, exams

Research and university education

2003-2005

Professor Associate

Humber College, Toronto, Ontario, Canada

▪ Teach astronomy classes (part-time)

College education

1998-2000

Computer Developer

Financial Models, Toronto, Ontario, Canada

▪ Software maintenance and development

Business company

1997-1998

Internet Developer

International Programmers Guild, Mississauga, Ontario, Canada

▪ Develop and maintain internet products

Business company

1991-1997

Research Assistant Astronomer

Astronomical Institute of the Romanian Academy, Bucharest, Romania

▪ Astronomy personal research, observations, public outreach

Research

EDUCATION AND TRAINING

2000-2005

PhD (Physics and Astronomy)

York University, Toronto, Ontario, Canada

- Thesis: Infrared Properties of Star Forming Dwarf Galaxies. Advisor: Prof. Marshall McCall.

1993-1997

PhD (Mathematics and Astronomy)

Babes-Bolyai University, Cluj Napoca, Romania

- Thesis: Study of some Dynamical Phenomena in the Solar System. Advisor: Prof. Arpad Pal.

1986-1991

MSc (Mathematics and Computer Science)

University of Craiova, Romania

- Thesis. Calculus of the Orbits and Ephemerides in the Solar System. Application on the Computer.

PERSONAL SKILLS

Mother tongue(s): Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	Fluent	Fluent	Fluent	Fluent	Fluent
	TOEFL (2000, very good)				
Spanish	Fluent	Fluent	Fluent	Good	Good
French	Fluent	Fluent	Good	Good	Good

Communication skills

- good communication skills gained based on the experience as researcher, support astronomer, teaching, public outreach and business (two personal small astro-tourism businesses and two jobs as computer developer) located in 6 countries, speaking mother tongue and 3 foreign languages

Organisational / managerial skills

- Leading the EURONEAR project (2006-2016)
- Manager of the ING studentship program (2013-2016)
- Manager of the INT telescope (2012-2015)
- Astro Travels (Spain: 2009-2016) and TSE99 (Canada, 1999) astro-tourism small businesses
- Manager of the Cerro Armazones Observatory, Chile (2007-2008)
- Conducting many observing runs and data reduction of images and spectra acquired on 28 telescopes in Spain, Chile, Hawaii, Canada, Mexico, France and Romania (1991-2016)

Job-related skills

Main interests in astronomy:

- Dwarf galaxies: dwarf irregulars, blue compact dwarfs, dwarf ellipticals, dwarf spheroidals;
- Asteroids and comets: near Earth asteroids, main belt asteroids, main belt comets;
- Observing techniques: near infrared and visible imaging, large field surveys, spectroscopy;
- Astronomy education and public outreach;
- Astronomy software development, data mining, algorithms, big data;
- Astronomical observatories, site characterization, instrumentation.

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving

Proficient	Proficient	Proficient	Proficient	Proficient

- Operating systems: Linux (Fedora, Ubuntu, Redhat), Windows, MSDOS, Alpha/Open VMS
- Programming: Turbo Pascal, Delphi, C/C++, Turbo C++, FORTRAN, Python
- CCD image processing: IRAF, THELI, SExtractor, IDL, Astrol, QMIPS, WinMips
- Internet development: Perl, PHP, CGI, HTML, Java Script
- Relational databases: Sybase, SQL, Access, D-Base

Other skills

- Part-time Teaching Astronomy and Computer Sciences in Romania (professor, Ion Barbu and Miron Nicolescu colleges, Bucharest) and Canada (teaching assistant York University, Toronto)

- Research associate of the following institutes:
  - Instituto Astrofisico de Canarias (IAC, Tenerife: 2010-2016),
  - Institute de Mecanique Celeste et Calculs des Ephemerides (IMCCE, Paris: 2006-2016),
  - Astronomical Institute of the Romanian Academy (2000-2011)
  - University of Craiova (2016)

Driving licence B (Romania, Canada and Spain)

ADDITIONAL INFORMATION

Publications

Refereed publications: 62 (22 as first author). We include bellow only those in NEAs:

- First EURONEAR NEA discoveries from La Palma using the INT, MNRAS 449, 1614, 2015
- 739 observed NEAs and new 2-4m survey statistics within the EURONEAR network , P&SS 85, 299, 2013
- Mining the ESO WFI and INT WFC archives for known Near Earth Asteroids. Mega-Precovery software, Astron. Narchr, 334, 718, 2013
- EURONEAR – Recovery, Follow-up and Discovery of NEAs and MBAs using Large Field 1-2m Telescopes, P&SS 59, 1632, 2011
- Mining the CFHT Legacy Survey for known Near Earth Asteroids, Astron. Nachr., 332, 6, 580, 2011
- More than 160 Near Earth Asteroids observed in the EURONEAR Network, A&A 511A, 40, 2010
- EURONEAR – Data Mining of Asteroids and Near Earth Asteroids, Astron. Narchr. 330, 698, 2009
- EURONEAR – First Results, P&SS 56, 1913, 2008
- About 30,000 positions of about 5,000 minor planets and 1500 NEAs (follow-up, recovery and discovery) published in more than 100 Minor Planet Circulars and Minor Planet Electronic Circulars observed by EURONEAR, 2006-2016
- High-Precision Astrometry of NEAs via EURONEAR Observations, RoAJ 20, 119, 2010
- Planning Near Earth Asteroid Observations on a 1m Class Telescope, RoAJ 16/2, p. 201, 2006
- Observing Near Earth Asteroids with a Small Telescope,, Romanian Astronomical Journal 14/2 and 15/1, 2004 and 2005

Conferences Presentations in over 20 international conferences
Projects EURONEAR (2006-2016)
Citations 804 citations (total)
594 refereed citations of refereed papers
135 refereed citations of first author refereed papers

ANNEXES

Full CV and links available here:
http://www.ovidiuv.ca/Vaduvescu-CV.pdf

Europass Curriculum Vitae

Personal informations

First name(s) / Surname(s)	**DUMITRU VULCANOV**
Address	Timisoara (Romania)
Telephone(s)	Mobile
Fax(es)	
E-mail(s)	
Nationality	Romanian
Date of birth	25 November 1954

Work experience

Dates	2013 → present
Occupation or position held	President of the South East European Network for Mathematical and Theoretical Physics (SEENET-MTP)
Main activities and responsibilities	Coordinating the administrative, scientific and mobility programs of the network
Name and address of employer	SEENET-MTP Office, University of Nis, Serbia

Dates	2008 → 2016
Occupation or position held	Dean of the Physics Faculty, West University of Timisoara
Main activities and responsibilities	-Responsible for all activities of the faculty (education, administrative and research); Leads Faculty Board (Council); coordinates the curricula in all fields; he is in charge of making the payrolls, the timetable classes; responsible for admissions, matriculations, expulsions etc. -sets the faculty development strategy; represents the Faculty in the University Boards, etc.
Name and address of employer	West University of Timisoara, Physics Faculty, V.Parvan Ave. No. 4, 300223,Timisoara
Type of business or sector	Education and research

Dates	2003 → present
Occupation or position held	PhD. Professor
Main activities and responsibilities	-Teaching lectures and seminaries/laboratories of Electrodynamics, Special Theory of Relativity, General Relativity, Gravity and Cosmology, Computational Physics, Advanced Databases and Operating Systems -Research in General Relativity and Cosmology, numerical and symbolic computations in Gravity and Cosmology, Advanced Databases and Operating Systems -Director of Studies for the Physics-Informatics undergraduate program -Director of Studies for the Computational Physics and Informatics, Astrophysics and Elementary Particles master programs.
Name and address of employer	West University of Timisoara, Faculty of Physics, V.Parvan Ave. No. 4, 300223,Timisoara
Type of business or sector	Education and research

Dates	2000 - 2003
Occupation or position held	Reader (senior lecturer), PhD.
Main activities and responsibilities	-Teaching lectures and seminars/laboratories of Electrodynamics, Special Theory of Relativity, General Relativity, Gravity and Cosmology, Computational Physics, Advanced Databases and Operating Systems -Research in General Relativity and Cosmology, numerical and symbolic computations in Gravity and Cosmology. -Director of Studies to the Physics-Informatics specialization
Name and address of employer	West University of Timisoara, Faculty of Physics, V.Parvan Ave. No. 4, 300223,Timisoara
Type of business or sector	Education and research
Dates	1992 - 2000
Occupation or position held	Lecturer, PhD.
Main activities and responsibilities	-Teaching lectures and seminars/laboratories of Electrodynamics, Special Theory of Relativity, General Relativity, Gravity and Cosmology, Computational Physics. -Research in General Relativity and Cosmology, numerical and symbolic computations in Gravity and Cosmology.
Name and address of employer	West University of Timisoara, Faculty of Physics, V.Parvan Ave. No. 4, 300223,Timisoara
Type of business or sector	Education and research
Dates	1990 - 1992
Occupation or position held	Lecturer
Main activities and responsibilities	-Teaching General Physics courses, seminars and laboratories at Faculties of Mechanics, Agricultural Mechanics, Computers and Electrotechics. -Head of the gravity and cosmology research group.
Name and address of employer	'Politehnica' University Timisoara, Physics Department, Timisoara
Type of business or sector	Education and research
Dates	1987 - 1990
Occupation or position held	Assistant
Main activities and responsibilities	-Teaching General Physics seminaries and laboratories at Faculties of Mechanics, Agricultural Mechanics, Computers and Electrotechics -Head of the gravity and cosmology research group.
Name and address of employer	'Politehnica' University Timisoara, Physics Departament, Timisoara
Type of business or sector	Education and research
Dates	1982 - 1987
Occupation or position held	Physicist researcher
Main activities and responsibilities	Research and development of technologies for nondestructive testing and controll using X-ray, ultrasound, magnetic and penetrant flows; authorization ISCIR Level II; training courses and qualifications in the field. Teaching general physics seminars and laboratories at Physics Department of Politehnica University Timisoara ass associate assistant
Name and address of employer	Welding and Testing Materials Institute (ISIM) Timisoara
Type of business or sector	Research and technological development

Dates	1978 - 1982
Occupation or position held	Physics teacher
Main activities and responsibilities	-teaching physics and technical subjects to IX-XII high School classes -responsible of the high-school Physics experimental group
Name and address of employer	Nicolae Balcescu High-school (today Colegiul National Carol)- Craiova
Type of business or sector	Education

Education and training

Dates	1985 - 1995
Title of qualification awarded	PhD in Theoretical Physics, advisor : Prof. Ioan Gottlieb
Principal subjects / occupational skills covered	General Relativity and Gravitation, Computational Physics, Quantum Field Theories
Name and type of organisation providing education and training	University of "Al. I. Cuza" Iasi - Faculty of Physics

Dates	1982 - 1984
Title of qualification awarded	Level II ISCIR certificate for nondestructive testing
Principal subjects / occupational skills covered	nondestructive testing of welded joints and metals using X-rays, ultrasonic, penetrating liquids and magnetic fluxes
Name and type of organisation providing education and training	ISIM Timisoara and ISCIR

Dates	1982
Title of qualification awarded	'Definitivat' in teaching
Principal subjects / occupational skills covered	Physics
Name and type of organisation providing education and training	University of Craiova, Faculty of Physics

Dates	1974 - 1978
Title of qualification awarded	Physics Bachelor's Degree with Distinction
Principal subjects / occupational skills covered	Physics
Name and type of organisation providing education and training	University of Timisoara (today West University of Timisoara)

Dates	1973 - 1974 and August 1978 – Military stage TR
Title of qualification awarded	Sublocotentent (in reserve)
Principal subjects / occupational red	Basic military training, tactics and strategy. Military school for mountain rangers

Dates	1969 - 1973
Title of qualification awarded	Baccalaureate Degree
Name and type of organisation	Colegiul National Banatean Timisoara

Mother tongue(s)	**Romanian**
Other language(s)	**English, French, German**
Computer skills and competences	Expert in advanced operating systems (Linux, BSD, FreeBSD, Solaris, etc)
Other Activities	1996 - NATO Advanced Research scholarship - Koln University, Germany 1999 - NATO-DAAD Advanced Research scholarship - AEI Posdam, Germany 2000-2008 - Visiting researcher at AEI Posdam (Germany) financed as MPG contracts/scholarships, working in the numerical relativity group (led by prof. Ed Seidel) 2009-2011 Stages of Visiting Professor at University of Nis (Serbia) within the SEENET-MTP projects 2012 - Expert evaluator for Romanian Space Agency STAR program
Administrative Training	2011 - Graduating a special course for 'Improving University Management', specific modules: Management of tertiary activities, Support services for students.
Publicationss	More than 60 articles (18 in ISI journals)and communications, 40 citations, 6 books

List of most important articles

1. D.N. Vulcanov -ADM formalism applied to some space-time models using EXCALC algebraic programming, Int. J. of Mod. Phys. 5, No. 6, 973-985 (1994)

2. D.N. Vulcanov - Algebraic programming in the Hamiltonian treatment of an inationarymodels, Int. J. of Mod. Phys. 6, No.3, 317-326 (1995)

3. D.N. Vulcanov, I.I. Cotaescu - New Routines for Algebraic Programing of the Dirac Equation, Int. J. Mod. Phys. C 8, No. 2, 273-286 (1997)

4. D.N. Vulcanov, I.I. Cotaescu - Dirac Field Gravity Inertial E_ects and Computer Algebra, Int. J. Mod. Phys. C 8, No. 2, 345-359 (1997)

5. D.N. Vulcanov - Algebraic programming in the hamiltonian treatment of the Einstein-Maxwell equations, Int. J. Mod. Phys. C 9, No. 1, 103-111 (1998)

6. D.N. Vulcanov, I.I. Cotaescu - Classical Oscillators in General Relativity, Europhys. Lett., 49, no. 2, 156-161 (2000)

7. G. Ardelean, I.I. Cotaescu, D.N. Vulcanov - Classical Gaussian Bag in (1+1)-Relativity, Physics Letters A, 238, 147-151, 2001

8. D.N. Vulcanov, M. Alcubierre - Testing the Cactus code on exact solutions of Einstein equations,, Int. J. Mod. Phys. C , vol. 13, No. 6 pag 805 (2002)

9. D.N. Vulcanov - Calculation of the Dirac equation in curved space-times with possible tor sion using MAPLE and REDUCE, Computer Physics Communications, 154, (2003), p. 205

10. D.N. Vulcanov , V.D. Vulcanov- The Use of Maple Platform for the Study of Geodesic Motion on Curved Spacetimes, IEEE Computer Society Transactions on Computers, Synasc06 post-proceedings p. 55-62 (2006) (http://www.computer.org/portal/site/ieeecs)

11. D.N. Vulcanov - New results in the use of "reverse engineering" method in cosmologies with scalar _eld, Central Europeean Journal of Physics, vol. 6(1), pag. 84-96, 2008

12. D.N. Vulcanov - Errors and convergence in numerical simulations of Ricci ow on 2-dimensional surfaces, American Institute of Physics, Proceeding of TIM08 conference, vol. CP1131,2009

13. D.N. Vulcanov - Applying the reverse engineering method to certain cosmologies with scalar field, Rom. Journal of Physics, vol. 55, No. 1-2, p.227, 2010

14. D.N. Vulcanov, G.S. Djordjevic - On cosmologies with non-minimally coupled scalar _eld, reverse engineering method and the Einstein frame, Rom. Journal of Physics, vol. 57, no. 5-6, pag. 229-234 (2012).

15. Ciprian A. Sporea, Dumitru N. Vulcanov, "Using MAPLE+GRTensorII in teaching basics of general relativity and cosmology", Romania Reports in Physics ,vol. 68 No. 1, p. 29-40 (2016).

16.

List of most important research grants and contracts

Project / Institution	**Position**	**Duration**..
Study of dynamical systems with applications in space technology / ROSA	Director	1996
Relativistic effects of cosmic objects and satellite motion in the Solar System / ROSA	Director	1996-2001
Models and mechanisms of production and detection of gravitational waves / ROSA	Director	2002-2004
Symmetries and super-symmetries in quantum gravity and computational cosmological models / ROSA	Subprogram director	2004-2006
Fundamental interactions and geometrodynamics / CEEX - ANCSI	Subprogram director	2006-2008
Evaluation of Romanian research in Physics / IFA	Partner person in-charge	2008-2011
Computational methods in scientific investigation of space-COMISIS / ROSA – STAR Program	Project manager	2013-2016

Timisoara, April 2016

Prof.dr. Dumitru Vulcanov

CURRICULUM VITAE

Adrian Stefan CARSTEA

DATE PERSONALE:

-data nasterii: 18 mai 1970, Pitesti, ROMANIA

-situatia familiala: casatorit, 4 copii

-nationalitatea: Romana

-adresa e-ma

-web: www.events.theory.nipne.ro/gap si www.theory.nipne.ro/~acarst

POZITIA CURENTA:

-cercetator stiintifica gradul 1, Institutul de Fizica si Inginerie Nucleara, Horia Hulubei, (IFIN-HH) Departamentul de Fizica Teoretica, Reactorului 50, 077125, Magurele, Bucuresti, Romania.

STUDII:

- Octombrie 2014: Doctorat - abilitare in matematica in cadrul Institutului de Matematica al Academiei Romane;

  Teza de abilitare: *Singularitati si Integrabilitate in sisteme dinamice birationale in planul proiectiv.*

- Octombrie 1998: Doctorat in Fizica Teoretica in cadrul Institutului de Fizica Atomica, Magurele, Bucuresti;

  Teza de doctorat: *Contributii la teoria sistemelor neliniare complet integrabile; structuri neliniare slab localizate.*

- Iunie 1995: Diploma de studii aprofundate in “Teoria sistemelor atomice a cimpurilor cuantice si starii condensate” in cadrul Facultatii de Fizica, Universitatea Bucuresti

  Teza de studii aprofundate: *Retele Toda; solutii rationale*

- Iunie 1994: Diploma de Licenta in Fizica Teoretica, Universitatea din Bucuresti, Facultatea de Fizica

  Teza de licenta: *Ecuatia Schrodinger neliniara perturbata si renormalizarea solutiei multisolitonice*

EXPERIENTA PROFESIONALA:

- din septembrie 1996 pina in prezent: cercetator cadrul Institutului de Fizica si Inginerie Nucleara, Horia Hulubei, (IFIN-HH) Departamentul de Fizica Teoretica, Reactorului 50, 077125, Magurele, Bucuresti, Romania.

- ianuarie 2003 ---- iulie 2003; pozitie postdoctorala Departamentul de Fizica Teoretica, grupul de Fizica Matematica, Ecole Polytechnique (CNRS), Palaiseau, Paris, Franta (grupul Prof. Alfred Ramani)

- ianuarie 2001 ----- iulie 2001; pozitie postdoctorala Departamentul de Fizica Teoretica, grupul de Fizica Matematica, Ecole Polytechnique (CNRS), Palaiseau, Paris, Franta (grupul Prof. Alfred Ramani)

VIZITE DE COLABORARE STIINTIFICA:

- Decembrie 2013: professor invitat, IBS Center for Geometry and Physics, Pohang, Korea (invitat de Prof. Calin Lazaroiu)

- Mai 2009: professor invitat, Universitatea Paris VII (invitat de Prof. Basil Grammaticos)

- Mai 2007: professor invitat, Universitatea Paris VII (invitat de Prof. Basil Grammaticos)

- Iunie 2005: professor invitat, Universitatea Paris VII (invitat de Prof. Basil Grammaticos)

- Februarie 2005: cercetator invitat, University of Tokyo, Graduate School of Mathematical Sciences (invitat de Prof. Junkichi Satsuma)
- Noimebrie 2004: cercetator invitat, University of Tokyo, Graduate School of Mathematical Sciences (invitat de Prof. Junkichi Satsuma)
- Martie 2004: cercetator invitat, Universitatea Paris VII (invitat de Prof. Basil Grammaticos)

GRANTURI DE CERCETARE/PREMII:

- Director de proiect grant IDEI 50, PN-II/2011-2014 "*Singularities, integrability and soliton phenomenology in discrete and ultradiscrete dynamical systems*"
- Director de proiect grant IDEI 325, PN-II/2007-2010*:"Nonlinear dynamics and stochastic effects in gene regulatory networks"*
- Director de proiect grant CNCSIS 121/2004-2007: „*Molecular modelling of charge transport in DNA"*
- Premiul „Stefan Procopiu" al ACADEMIEI ROMANE (1998)

ACTIVITATI PROFESIONALE:

- Membru al American Mathematical Society (din 2012)
- Coorganizator al seminarului stiintific „Geometry and Physics" (GAP)
- Referent la reviste: *Journal of Physics A: Mathematical and Theoretical, Physics Letters A, Inverse Problems, Chaos Solitons and Fractals, Journal of Mathematical Physics, Nonlinearity etc.*

ACTIVITATE DIDACTICA:

- Septembrie 2008---iunie 2009: mecanica clasica la Facultatea de Constructii Civile, Bucuresti

Adrian Stefan Carstea

LISTA DE LUCRARI – ADRIAN STEFAN CARSTEA

10 PUBLICATII RELEVANTE DUPA DOCTORAT:

1. *A classification of two dimensional integrable mappings and rational elliptic surfaces*, **A. S. Carstea**, T. Takenawa, J. Phys. A: Math.Theor. 45, 155206, (2012)

2. *On the geometry of Q(4) mapping*, **A. S. Carstea**, Contemporary Mathematics vol. 593, 231, (2013)

3. *A note un minimization of elliptic surfaces from birational dynamics*, **A. S. Carstea**, T. Takenawa, Journal of Nonlinear Mathematical Physics, 20, sup: 1, 17, (2013)

4. *Deautonomizing integrable non-QRT mappings* **A. S. Carstea**, B. Grammaticos, A. Ramani, J. Phys. A: Math. Theor , 42 Issue: 48 Article Number: 485207 (2009)

5. *On the non-autonomous form of the Q(4) mapping and its relation to elliptic Painleve equations*, A. Ramani, **A. S. Carstea**, B. Grammaticos
J. Physics A: Math. Theor., 42 Issue: 32 Article Number: 322003 (2009)

6. *Do integrable cellular automata have the confinement property?* ,B. Grammaticos, A. Ramani, K. M. Tamizhmani, T. Tamizhmani, **A. S. Carstea**,
J. Phys A: Math. Theor. 40, F725, (2007)

7. *On the autonomous limit of discrete Painlevé equations*, A. Ramani, **A. S. Carstea**, B. Grammaticos, Y. Ohta, Physica A, 305, 437-444, (2002).

8. *Extension of the bilinear formalism to supersymmetric KdV-type equations*, **A. S. Carstea** , Nonlinearity, 13, 1645-1656, (2000).

9. *Construction of the soliton solution for the N=1 supersymmetric KdV hierarchy*, **A. S. Carstea**, A. Ramani, B. Grammaticos, Nonlinearity, 14, 1419-1423, (2001).

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1. *Contributii la teoria sistemelor neliniare complet integrabile; structuri neliniare slab localizate*, Institutul de Fizica Atomica 1998

PUBLICATII IN REVISTE INDEXATE ISI:

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8. *Beyond nonlinear Schrodinger equation approximation for an anhramonic chain with long range interaction potentials*, D. Grecu, **A. S. Carstea**, A. Visinescu Journal of Nonlinear Mathematical Physics, 8, 139-144, (2001)

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29. *Proteomic waves in networks of transcriptional regulators*, **A. S. Carstea**, Math.Comp. Sim. 80, 66, (2009)

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31. *On the non-autonomous form of the Q(4) mapping and its relation to elliptic Painleve equations*, A. Ramani, **A. S. Carstea**, B. Grammaticos
J. Physics A: Math. Theor., 42 Issue: 32 Article Number: 322003 (2009)

32. *Deautonomizing integrable non-QRT mappings* **A. S. Carstea**, B. Grammaticos, A. Ramani, J. Phys. A: Math. Theor , 42 Issue: 48 Article Number: 485207 (2009)

33. *Proteomic signals in modular transcriptional cascades. A discrete time and cellular automaton approach,* **A. S. Carstea**, A. T. Grecu, D. Grecu, Physica D, 239, 12, 967, (2010)

34. *Bilinear approach to delay-Painleve equations*, **A. S. Carstea** J. Phys. A: Math.Theor. 44, Issue 10, article number: 105202, (2011)

35. *A classification of two dimensional integrable mappings and rational elliptic surfaces*, **A. S. Carstea**, T. Takenawa, J. Phys. A: Math.Theor. 45, 155206, (2012)

36. *On the geometry of Q(4) mapping*, **A. S. Carstea**, Contemporary Mathematics vol. 539, 231, (2013)

37. *A note un minimization of elliptic surfaces from birational dynamics*, **A. S. Carstea**, T. Takenawa, Journal of Nonlinear Mathematical Physics 20, 17, (2013)

38. C. N. Babalic**, A. S. Carstea**, *On various discretizations of a general Volterra system,* submitted to J. Phys. A: Math. Theor. 46, 145205, (2013)

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CONFERINTE WORKSHOPURI SEMINARII:

1.Poster "*Rational and Mixed rational-soliton solutions of Toda lattice"*, **A. S. Carstea**, D. Grecu, **International Conference on Nonlinear Dynamics, Chaotic and Complex Systems**, Zakopane, Poland, 7-11 Nov. 1995

2.Lectie invitata "*On the dynamics of Rational Solutions for 1-D Volterra System"*, **A. S. Carstea**, Centre de Recherche Mathematiques, Montreal, CRM, 25, 65-72, (2000) Proceedings of International Conference, **"Symmetries and Integrability of Difference Equations"** Sabaudia, Italy, 16-22 May, (1998)

3. "*Long range interaction corrections on the quantum vibronic soliton"*, D. Grecu, **A. S. Carstea**, A. Visinescu, Proceedings of the Sixth **International Conference on "Path Integrals from peV to TeV" 50 years after Feynman's paper**, Florence, Italy, 25-29 august 1998, Editors, R. Casalbuoni et al. World Scientific, 399-402, (1999)

4. "*Bilinear Formalism of Supersymmetric KdV type Equations"*, **A. S. Carstea**, Proceedings of the Workshop on **"Nonlinearity, Integrability and all that: Twenty years after NEEDS'79**, Lecce, Italy, 1-10 july, 1999, Editors M. Boiti et al. World Scientific, 75-81, (2000)

5. "*Rational Solutions of a Mixed KdV+mKdV+BO" equation*, **A. S. Carstea**, D. Grecu, A. Visinescu, Proceedings of the Workshop on **"Nonlinearity, Integrability and all that: Twenty years after NEEDS'79**, Lecce, Italy, 1-10 july, 1999, Editors M. Boiti et al. World Scientific, 82-88, (2000)

6. "*Supersymmetric Soliton Equations"*, A. Ramani, A. S. Carstea, B. Grammaticos, Proceedings of the Symposium "**Theory and Application on Nonlinear Wave Phenomena"** Kasuga, Fukuoka, Japan, November 14-16, 2001, Reports of RIAM No. 13ME-S4, pag. 36-42, (2002)

7. "*Crossover behaviour between KdV and mKdV equations in Cold Plasma with Negative Ions"*, D. Grecu, A. Visinescu, **A. S. Carstea**, Global Analysis and Applied Mathematics, 729, 332-338, American Institute of Physics, (2004), Proceedings of **International Workshop on Global Analisys, Ankara**, Turkey, 15-17 April, (2004)

8. Lectie invitata "*Localised and nonlocalised structures in nonlinear lattices with fermions"*, **A. S. Carstea**, invited talk at the "**International Conference on Nonlinear Integrable Systems and their world applications" dedicated to Prof. Martin Kruskal 80-th anniversary and Prof. M. Toda 88-th anniversary**, Tokyo Japan14-18 feb. 2005

9. Lectie invitata "*On the dynamics of proteomic signals in genetic transcriptional regulators"*, **A. S. Carstea**, **International Conference "Recent advances and applications in nonlinear sciences"** Tokyo Japan, 16-19 oct. 2006

10. Seminar la Departmentul de Fizica Universitatea British Columbia Vancouver Canada, *On the dynamics of proteomic signals in genetic transcriptional regulators,* **A. S. Carstea,** 13 april

2007, la invitatia Prof. Steve Plotkin.

11. "*Proteomic signals in gene regulatory networks"*, **A. S. Carstea**, talk at **IMACS Conference on Nonlinear Evolution Equations and Wave Phenomena; Computation and Theory**, University of Georgia, Athens USA, 16-19 april 2007

12. "*On the integrability of some HKY-type mappings"*, **A. S. Carstea**, T. Takenawa talk at **IMACS Conference on Nonlinear Evolution Equations and Wave Phenomena; Computation and Theory**, University of Georgia, Athens USA, 16-19 april 2009

13. Lectie invitata la **Lorentz Center Workshop on Discrete Integrable Systems** (Leiden 18-22, july 2011), "*Invariants of non-QRT mappings and rational surfaces with higher index"*

14. Lectie invitata la **JOINT MATHEMATICS MEETING**, **Boston USA (4-6 jan.2012**) "*Q4-elliptic Painleve equation and rational elliptic surfaces"* at the section: Algebraic and Geometric aspects of Integrable Systems and Random Matrices.

15. Seminar la Centrul de Geometrie si Fizica, IBS, Pohang, Korea, A. S. Carstea, *Integrable systems and non-minimal rational elliptic surfaces, 19. Dec. 2013* (la invitatia Prof. Calin Lazaroiu)

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