CURRICULUM VITAE

PERSONAL DATA
- o First Name: Cătălin Bogdan
- o Last Name: Galeş
- o Date and place of birth: July 29, 1976/ Gura Humorului (Romania)
- o Work address: Al. I. Cuza University of Iaşi, Faculty of Mathematics, Blvd. Carol I, No. 11, 700506, Iaşi, Romania
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EDUCATION
- o 1990-1994: High School: Liceul Petru Rareş (Suceava);
- o 1994-1998: Faculty of Mathematics, Al.I. Cuza University of Iaşi;
- o 1998-2000: Master studies, Faculty of Mathematics, Al. I. Cuza University of Iaşi
- o 2000-2004: Ph.D. thesis: Initial boundary value problems in continuum mechanics, Al.I. Cuza University of Iaşi (supervisor: Prof. Stan Chiriţă).

RESEARCH INTERESTS
Mechanics of particles and systems
- o Celestial mechanics
- o Perturbation theories
- o Hamiltonian and Lagrangian mechanics

Mechanics of deformable solids
- o Mixture effects
- o Saint-Venant's principle
- o Uniqueness of solutions
- o Stability
- o Vibrations

ACADEMIC CAREER
- o 1999 - 2001: Research assistant, Faculty of Mathematics, Al. I. Cuza University of Iaşi
- o 2001 - 2004: Assistant professor, Faculty of Mathematics, Al. I. Cuza University of Iaşi
- o 2004 - 2014: Lecturer, Faculty of Mathematics, Al. I. Cuza University of Iaşi
- o Since 2014: Associate Professor, Faculty of Mathematics, Al. I. Cuza University of Iaşi

AWARDS
1. **Romanian Academy Prize Spiru Haret** for the group of papers: *Modelling in continuum mechanics*, published in 2011.
2. **Researcher of the year**, prize offered by Al. I. Cuza University of Iaşi for the papers published in 2012.

HIGHEST ACADEMIC RECOGNITION RECEIVED
1. **Keynote speaker at Stardust Final Conference**, 31st October - 4th November, 2016, **ESA ESTEC**, Netherlands: *Dynamics of resonances in the space debris problem* (https://www.stardust2013.eu/Training/Conferences/KeynoteTalks/tabid/5863/Default.aspx);
2. Between September 2016 and January 2017, the following paper has appeared as **Featured Article** on the web page of the **SIAM Journal on Applied Dynamical Systems** (https://epubs.siam.org/journal/sjaday): A. Celletti, C. Galeş, G. Pucacco, *Bifurcation of lunisolar*

secular resonances for space debris orbits, **SIAM Journal on Applied Dynamical Systems**, 15 (2016), 1352-1383;

3. Since January 2018 till the present moment (April 20), the following paper appears as **Featured Article** on the web page of the **SIAM Journal on Applied Dynamical Systems** (https://epubs.siam.org/journal/sjaday): A. Celletti, C. Galeş, *Dynamical Dynamics of resonances and equilibria of Low Earth Objects,* **SIAM Journal on Applied Dynamical Systems**, 17 (2018), 203-235;

4. Committee member of the school: *Satellite Dynamics and Space Missions: Theory and Applications of Celestial Mechanics*, August 28 - September 2, 2017, San Martino al Cimino (VT), Italy, (http://adams.dm.unipi.it/~simca/sdsm2017/).

GRANTS
Director of two national grants for young researches:
1. CEEX grant, code 72, no. 1510/7.04.2006, period 2006-2008.
2. CNCSIS grant, code TE_184, no. 86/30.07 2010, period 2010-2013.

Member of 8 national grants.

INTERNATIONAL COLLABORATION
Alessandra Celletti, Department of Mathematics, University of Rome Tor Vergata;
Christoph Lhotka, Space Research Institute, Austrian Academy of Sciences;
Giuseppe Pucacco, Department of Physics, University of Rome Tor Vergata;
Christos Efthymiopoulos, Research Center for Astronomy and Applied Mathematics, Academy of Athens;
Aaron Rosengren, Department of Aerospace and Mechanical Engineering, University of Arizona;
Fabien Gachet, Office national d'études et de recherches aérospatiales (ONERA) - The French Aerospace Lab.

PAPERS
Author of 43 scientific research papers, 35 of which are published in ISI indexed journals, and 6 book chapters.

INVITED SPEAKER AT ACADEMIC CONFERENCES
1. **International Conference on Applied and Pure Mathematics**, 5th edition, November 2-5, 2017, Iaşi, Romania: *Effects of gravitational resonances in the space debris problem.*
2. **The Seventh International Meeting on Celestial Mechanics (CELMEC VII)**, September 3-9, 2017, San Martino al Cimino (VT), Italy: *Resonance effects within LEO, MEO and GEO regions.*
3. **9th Humboldt Colloquium on Celestial Mechanics**, March 19-25, 2017, Bad Hofgastein, Austria: *Dissipative effects in the space debris problem.*
4. **Stardust Final Conference**, 31st October - 4th November, 2016, **ESA ESTEC**, Netherlands: *Dynamics of resonances in the space debris problem* (**keynote speaker**).
5. **XIII-ème Colloque Franco Roumain de Mathématiques Appliquées**, 25-29 Août, 2016, Iaşi: *Resonance effects in the dynamics of space debris.*
6. **Computational perturbative methods for Hamiltonian systems - Applications in physics and astronomy**, July 11-July 13, 2016, Athens: *A study of the lunisolar secular resonances for space debris by using the Hamiltonian formalism.*
7. **The Eighth Congress of Romanian Mathematicians**, June 26-July 1, 2015, Iaşi: *Dynamics of space debris: resonances and long term orbital effects.*
8. **1st Stardust Global Virtual Workshop (SGVW-1) on Asteroids and Space Debris**, 6-9 May 2014, Glasgow, Scotland: *A description of the dynamics of space debris in the 1:1 and 2:1 resonances by using the Hamiltonian formalism.*
9. **The Sixth International Meeting on Celestial Mechanics (CELMEC VII)**, September 1-7, 2013, San Martino al Cimino (VT), Italy: *A cartographic study of satellite and space debris dynamics.*

10. **European Congress on Computational Methods in Applied Sciences and Engineering**, September 10-14, 2012, Vienna: *Spatial behavior in the electromagnetic theory of microstretch elasticity.*
11. **8th European Solid Mechanics Conference**, July 9-13, 2012, Graz, Austria: *On the bending of plates in the electromagnetic theory of microstretch elasticity.*
12. **6th European Congress of Mathematics**, July 2-7 2012, Krakow, Poland: *Structural stability and convergence in piezoelectricity.*
13. **2th International Conference on Material Modelling**, August 31-September 2, 2011, Paris: *Spatial behavior of harmonic vibrations in viscoelastic materials.*
14. **Seventh Congress of the Romanian Mathematicians**, June 29-July 5, 2011, Braşov: *Spatial behaviour in the linear dynamic theory of magnetoelectroelasticity.*
15. **9th International Congress on Thermal Stresses**, June 5-9, 2011, Budapest: *On the asymptotic partition of energy in micromorphic thermopiezoelectricity*, (in collaboration with I.D. Ghiba and I. Ignătescu).
16. **Workshop for Young Researches in Mathematics**, May 12-13, 2011, Constanţa: *On the spatial behavior in viscoelastic cylinders.*
17. **Workshop on Partial Differential Equations**, November 25-26, 2010, Bucharest: *On the phase space of the restricted three body problem. Application to the Sun-Jupiter-Asteroid system.*
18. **10ème Colloque Franco Roumain de Mathématiques Appliquées**, 26-31 Août 2010, Poitiers (France): *Spatial behavior in viscoelastic materials.*
19. **3rd Conference on Nonlinear Science and Complexity**, July 28-31, 2010, Ankara (Turkey): *A cartographic study of the phase space of the restricted three body problem.*
20. **The Fifth International Meeting on Celestial Mechanics**, September 6-12, 2009, Viterbo (Italy): *On the phase space of the restricted three body problem.*
21. **The Asian Conference on Mechanics of Functional Materials and Structures**, October 31-November 3, 2008, Matsue (Japan): *On spatial behaviour in viscoelastic mixtures.*
22. **The International Congress of Theoretical and Applied Mechanics (ICTAM2008)**, August 24-29 2008, Adelaide (Australia).
23. **9 ème Colloque Franco Roumain de Mathématiques Appliquées**, Braşov, Roumanie, 28 Août - 2 Septembre 2008: *A mixture theory for micropolar thermoelastic solids.*
24. **The Mechanics Conference to celebrate the 100th Anniversary of the Department of Engineering Science and Mechanics**, May 29 & 30, 2008, Blacksburg, Virginia, USA: *A mixture theory for microstretch thermoviscoelastic solids.*
25. **The meeting Theory and Applications of Dynamical Systems**, Spoleto (Italy), June 24-28, 2007: *On the Dynamics of Asteroids.*
26. **5th SREAC's Meeting: Latest Progress in Astrophysics**, Athens, 5-6 October, 2007: *Investigation of asteroid dynamics via numerical methods* (in collaboration with C. Chiruţă).
27. **The international conference New Trends in Continuum Mechanics**, Constanţa, September 2003: *On the spatial behavior in the theory of swelling porous elastic soils.*
28. **The XXIII National Conference of Solid Mechanics**, Ploieşti, Romania, May 1999: *The Saint-Venant`s problem in micropolar elasticity.*

POPULARIZATION OF SCIENCE
A) Articles published in the local newspaper *Evenimentul de Iaşi*:
   1. *Total Lunar Eclipse: May 3-4, 2004* (May 3, 2004, in collaboration with S. Chiriţă);
   2. *Transit of Venus,* (June 5, 2004, in collaboration with Chiriţă);
   3. *Total Lunar Eclipse: October 28, 2004* (October 27, 2004);
   4. *The astronomical winter starts today* (December 21, 2004);
   5. *Vernal equinox* (March 19, 2005);
   6. *Autumnal equinox* (September 22, 2005);
   7. *Annular Solar eclipse: October 3, 2005* (September 30, 2005).
B) Interviews given to the local press for promoting various astronomical events.

DIDACTICAL ACTIVITIES
Courses:
   1. Astronomy (Faculty of Mathematics, Al. I. Cuza University of Iaşi);
   2. Hamiltonian and Lagrangian mechanics (Faculty of Mathematics, Al. I. Cuza University of Iaşi);

3. C sharp programming (Faculty of Mathematics, Al. I. Cuza University of Iaşi);
4. Rational Mechanics (Faculty of Mathematics, Al. I. Cuza University of Iaşi);
5. Celestial Mechanics (Faculty of Mathematics, Al. I. Cuza University of Iaşi);
6. Mathematics (Faculty of Geography and Geology, Al. I. Cuza University of Iaşi);
7. Continuum Mechanics (Faculty of Mathematics, Al. I. Cuza University of Iaşi).

Seminars:
1. Rational Mechanics (Faculty of Mathematics, Al. I. Cuza University of Iaşi);
2. Astronomy (Faculty of Mathematics, Al. I. Cuza University of Iaşi);
3. Hamiltonian and Lagrangian mechanics (Faculty of Mathematics, Al. I. Cuza University of Iaşi);
4. Continuum Mechanics (Faculty of Mathematics, Al. I. Cuza University of Iaşi);
5. Thermoelasticity (Faculty of Mathematics, Al. I. Cuza University of Iaşi);
6. Generalized models of continua (Faculty of Mathematics, Al. I. Cuza University of Iaşi);
7. Probabilities (Faculty of Mathematics, Al. I. Cuza University of Iaşi);
8. Mathematics (Faculty of Chemistry and Faculty of Geography and Geology, Al. I. Cuza University of Iaşi);
9. JAVA programming (Faculty of Mathematics, Al. I. Cuza University of Iaşi).

April 20, 2018   Cătălin Galeş