CĂTĂLIN GALEŞ ' S LIST OF SCIENTIFIC PUBLICATIONS

A. Top 10 relevant papers published after obtaining the PhD degree

1. C. Galeş, A mixture theory for micropolar thermoelastic solids, **Mathematical Problems in Engineering,** Vol. 2007 (2007), Article ID 90672, 21 pages.
2. C. Galeş and S. Chiriţă, On spatial behavior in linear viscoelasticity, **Quarterly of Applied Mathematics, 67** (2009), 707-723.
3. C. Galeş, Some results in micromorphic piezoelectricity, **European Journal of Mechanics-A/Solids, 31** (2012), 37-46.
4. C. Galeş, Spatial behavior in the electromagnetic theory of microstretch elasticity, **International Journal of Solids and Structures**, **48** (2011), 2755-2763.
5. C. Galeş, Spatial behavior and continuous dependence results in the linear dynamic theory of magnetoelectroelasticity, **Journal of Elasticity, 108** (2012), 208-223.
6. C. Galeş, A cartographic study of the phase space of the restricted three body problem. Application to the Sun-Jupiter-Asteroid system, **Communications in Nonlinear Science and Numerical Simulation, 17** (2012), 4721-4730.
7. A. Celletti and C. Galeş, On the dynamics of space debris: 1:1 and 2:1 resonances, **Journal of Nonlinear Science 24** (2014), 1231-1262.
8. A. Celletti, C. Galeș and G. Pucacco, Bifurcation of lunisolar secular resonances for space debris orbits, **SIAM Journal on Applied Dynamical Systems**, **15** (2016), 1352-1383.
9. A. Celletti, C. Galeș, G. Pucacco and A. Rosengren, Analytical development of the lunisolar disturbing function and the critical inclination secular resonance, **Celestial Mechanics and Dynamical Astronomy**, **127** (2017), 259-283.
10. A. Celletti and C. Galeș, Dynamics of resonances and equilibria of Low Earth Objects, **SIAM Journal on Applied Dynamical Systems**, **17** (2018), 203-235.

B. PhD Thesis

Initial boundary value problems in continuum mechanics. Supervisor: Stan Chiriță. Examiners: Sanda Cleja-Țigoiu (University of Bucarest), Dorin Ieșan (Al.I. Cuza University of Iași), Valeriu Sava (Gh. Asachi Technical University of Iași). Thesis defense: December 19, 2003, at Al.I. Cuza University of Iași.

C. Papers published after December 2003

11. C. Galeş, Waves and vibrations in the theory of swelling porous elastic soils, **European Journal of Mechanics A/Solids, 23** (2004), 345-357.
12. C. Galeş, Potential method in the linear theory of swelling porous elastic soils, **European Journal of Mechanics A/Solids,** 23 (2004), 957-973.
13. C. Galeş, On the quasi-static boundary value problems in the theory of swelling porous elastic soils, **Multidiscipline Modeling in Materials and Structures, 2** (2006**),** 227-246.
14. C. Galeş, On the spatial behavior in the theory of viscoelastic mixtures, **Journal of Thermal Stresses**, **30** (2007), 1-24.
15. S. Chiriţă, C. Galeş and I. D. Ghiba, On spatial behavior of the harmonic vibrations in Kelvin-Voigt materials, **Journal of Elasticity, 93** (2008**),** 81-92.
16. C. Galeş, Some results in the dynamics of viscoelastic mixtures, **Mathematics and Mechanics of Solids**, **13** (2008), 124-147.
17. C. Galeş, On the asymptotic spatial behaviour in the theory of mixtures of thermoelastic solids, **International Journal of Solids and Structures, 45** (2008), 2117-2127.
18. S. Chiriţă and C. Galeş, A mixture theory for microstretch thermoviscoelastic solids, **Journal of Thermal Stresses, 31** (2008)**,** 1099-1124.
19. C. Galeş and C. Chiruţă, Investigation of asteroid dynamics via numerical methods, **Romanian Astronomical Journal, 18**, Supplement (2008), 161-175.
20. C. Galeş, On spatial behavior of the harmonic vibrations in thermoviscoelastic mixtures, **Journal of Thermal Stresses**, **32** (2009), 512 – 529.

21. C. Galeş, On the nonlinear theory of micromorphic thermoelastic solids, **Mathematical Problems in Engineering**, Volume 2010 (2010), Article ID 415304, 16 pages.
22. C. Galeş and I.D. Ghiba, On uniqueness and continuous dependence of solutions in viscoelastic mixtures, **Meccanica, 45** (2010), 901-909.
23. C. Galeş, A spatial decay estimate in thermoviscoelastic composite cylinders, **Analele Stiintifice Univ. Al. I. Cuza Iasi, Matematica**, **LVII** (2011), 111-129.
24. C. Galeş, On spatial behavior of harmonic vibrations in viscoelastic Reissner-Mindlin plates, **International Journal of Solids and Structures**, **48** (2011), 243-248.
25. C. Galeş, On uniqueness and continuous dependence in nonlinear thermoviscoelasticity, **Journal of Thermal Stresses**, **34** (2011), 366-377.
26. C. Galeş, I.D. Ghiba and I. Ignătescu, Asymptotic partition of energy in micromorphic thermopiezoelectricity, **Journal of Thermal Stresses**, **34** (2011), 1241-1249.
27. I.D. Ghiba and C. Galeş, A uniqueness result for the motion of micropolar solid-fluid mixtures in unbounded domain, **Annali dell'Universita di Ferrara**, **57** (2011) 275-286.
28. I.D. Ghiba and C. Galeş, On the fundamental solutions for micropolar fluid-fluid mixtures under steady state vibrations, **Applied Mathematics and Computation, 219** (2012), 2749-2759.
29. C. Galeş, Structural stability and convergence in piezoelectricity, **SIAM Journal on Applied Mathematics, 72** (2012), 1856-1868.
30. I.D. Ghiba and C. Galeş, Some qualitative results in the linear theory of micropolar solid-solid mixtures, **Journal of Thermal Stresses**, **36** (2013), 426-445.
31. C. Galeş and N. Baroiu, On the bending of plates in the electromagnetic theory of microstretch elasticity, **ZAMM, 94** (2014), 55-71.
32. A. Celletti and C. Galeş, Dynamical investigation of minor resonances for space debris, **Celestial Mechanics and Dynamical Astronomy**, **123** (2015), 203-222.
33. A. Celletti and C. Galeş, A study of the main resonances outside the geostationary ring, **Advances in Space Research**, **56** (2015), 388-405.
34. C. Lhotka, A. Celletti and C. Galeş, Poynting-Robertson drag and solar wind in the space debris problem, **Monthly Notices of the Royal Astronomical Society, 460** (2016), 802-815.
35. A. Celletti, C. Galeş, A study of the lunisolar secular resonance $2d\omega/dt+d\Omega/dt=0$, **Frontier in Astronomy and Space Sciences - Fundamental Astronomy**, 31 March 2016 | http://dx.doi.org/10.3389/fspas.2016.00011 (on-line paper)
36. A. Celletti, C. Efthymiopoulos, F. Gachet, C. Galeş and G. Pucacco, Dynamical models and the onset of chaos in space debris, **International Journal of Non-Linear Mechanics**, **90** (2017), 147-163.

D. Conference Proceedings

37. C. Galeş, On spatial behaviour in viscoelastic mixtures, **Proceedings of the Asian Conference on Mecanics of Functional Materials and Structures**, ACMFMS2008 (2008), 317-320.

E. Papers published before December 2003

38. C. Galeş, On Saint-Venant's problem in micropolar viscoelasticity, **Analele Ştiintifice ale Universitatii "Al. I. Cuza" Iaşi**, **46** (2000), 131-148.
39. C. Galeş, Some uniqueness and continuous dependence results in the theory of swelling porous elastic soils, **International Journal of Engineering Science, 40** (2002), 1211-1231.
40. C. Galeş, On the spatial behavior in the theory of swelling porous elastic soils, **International Journal of Solids and Structures**, **39** (2002), 4151-4165.
41. C. Galeş, On the asymptotic partition of energy in the theory of swelling porous elastic soils, **Archives of Mechanics, 55** (2003), 91-107.
42. C. Galeş, Spatial decay estimates for solutions describing harmonic vibrations in the theory of swelling porous elastic soils, **Acta Mechanica, 161** (2003), 151-164.
43. C. Galeş, Existence and uniqueness results in the theory of swelling porous elastic soils, **Analele Ştiintifice ale Universitatii "Al. I. Cuza" Iaşi**, vol. **49** (2003), 161-174.

F. Book chapters and articles published in encyclopedias

1. C. Galeş, A cartographic study of the phase space of the elliptic restricted three body problem: Application to the Sun-Jupiter-Asteroid system, pp. 83-96, in **Nonlinear and Complex Dynamics. Applications in Physical, Biological and Financial Systems**, J. Machado & D. Baleanu & A. Luo (eds), Springer 2011.
2. C. Galeş, Continuous Dependence Results, vol. 2|C-D, pp. 714-721, In R. Hetnarski (ed.) **Encyclopedia of Thermal Stresses**, Springer, 2014.
3. C. Galeş, Hamilton-Kirchhoff Principle, vol. 5|H-K, pp. 2109-2114, In R. Hetnarski (ed.) **Encyclopedia of Thermal Stresses**, Springer, 2014.
4. C. Galeş, Nonlinear Thermoelastic Model, vol. 7|N-P, pp. 3377-3387, In R. Hetnarski (ed.) **Encyclopedia of Thermal Stresses**, Springer, 2014.
5. C. Galeş, Structural Stability in Linear Thermoelasticity, vol. 8|Q-S, pp. 4688-4694, In R. Hetnarski (ed.) **Encyclopedia of Thermal Stresses**, Springer, 2014.
6. C. Galeş, Uniqueness and Continuous Dependence Results in Nonlinear Thermoviscoelasticity , vol. 11|U-Z, pp. 6303-6311, In R. Hetnarski (ed.) **Encyclopedia of Thermal Stresses**, Springer, 2014.

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