



Curriculum vitae Europass

Informații personale

Nume / Prenume	STERPU Mihaela
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Naționalitate	Română

Experiența profesională

Universitatea din Craiova

2008 – în curs Conferențiar universitar

- Activitate didactică (Geometrie analitică, Geometria curbelor și suprafețelor, Geometrie computațională, Fundamentele geometriei) – cursuri, activități de seminar și de laborator la nivel de licență;
- Activitate didactică: Teoria bifurcațiilor și aplicațiile lor în economie - curs și seminar la specializarea Master Matematici Aplicate;
- Activitate de cercetare.

Universitatea din Craiova

2002 – 2008 Lector universitar

- Activitate didactică (Geometrie analitică, Geometria curbelor și suprafețelor, Geometrie computațională și grafică pe calculator, Metodica predării matematicii) – cursuri, activități de seminar și de laborator la nivel de licență;
- Activitate de cercetare.

1992 – 2002 Asistent Universitar

- Activitate didactică (Geometrie analitică, Geometria curbelor și suprafețelor, Geometrie diferențială, Grupuri și geometrii, Spații fibrante) – activități de seminar și de laborator la nivel de licență;
- Activitate de cercetare.

Educație și formare

1997-2001 Studii doctorale în Matematică

Titlul obținut:	Titlul de Doctor în Matematică
Instituția	Institutul de Matematică „Simion Stoilow” al Academiei Române, București
Titlul tezei de doctorat	Contribuții la studiul bifurcațiilor unor sisteme dinamice tridimensionale
Conducător doctorat	Prof.univ.dr. Adelina GEORGERSCU

1987-1988 Studii de specializare în Algebră și Informatică

Calificarea / diploma obținută	Certificat de specializare
Titlul obținut	Specializare în algebră și informatică
Instituția	Facultatea de Matematică-Mecanică, Universitatea din București
Titlul lucrării de disertație	Clasificarea geometriilor tridimensionale
Conducător științific	Conf.univ.dr. K. Teleman

1983-1987 Studii de licență în Matematică

Calificarea / diploma obținută	Licențiat în Matematică
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Instituția	Facultatea de Matematică-Mecanică, Universitatea din București
Titlul lucrării de licență	Forme diferențiale Pfaff
Conducător științific	Conf.univ.dr. K. Teleman

Limbi străine cunoscute

Autoevaluare	Înțelegere		Vorbire		Scriere
Nivel european (*)	Ascultare	Citire	Participare la conversație	Discurs oral	Exprimare scrisă
Limba engleză	C2	C2	C2	C2	C2
Limba franceză	C1	C1	B2	B2	B2
Limba italiană	B2	B2	B2	B2	A2

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

Competențe de comunicare Excelente competențe de comunicare dobândite în cariera universitară din România.

Competențe digitale Microsoft Office, Mathematical software: Maple, Wolfram Mathematica; LaTeX; C.

Permis de conducere Categoria B

Publicații

Cărți • 5 cărți publicate la edituri naționale

Articole • 29 articole publicate în reviste/volume indexate ISI;
• 23 articole publicate în reviste indexate în baze de date internaționale;
• 7 articole publicate în volume ale unor Conferințe Internaționale.

Participări la conferințe • 42 de prezentări la conferințe internaționale și naționale.

Vizibilitate

h-index • Indice Web of Science =11
• Indice Scopus = 11
• indice Google Scholar = 12

Citări • In Web of Science: 29 articole indexate, cu 364 citări;
• In Scopus: 28 articole indexate, cu 480 citări;
• in Google Scholar: 800 citări.

Activități editoriale

Editor/Co-Editor • Managing Editor, Assistant Editor la "Annals of the University of Craiova-Mathematics and Computer Science Series", ISSN: 1223-6934, 14 volume: 39(2012)-52(2025); <http://inf.ucv.ro/~ami/index.php/ami>
• Membru în Editorial Board la "ROMAI Journal", ISSN: 1841-5512; <https://rj.romai.ro/>
• Special Issue Editor: "Research and Application of Data Optimization Model in Finance", a special issue of [Mathematics](#) (ISSN 2227-7390), 2023.

Societăți profesionale

Afilieri • Societatea de Științe Matematice din România
• Societatea Română de Matematici Aplicate și Industriale (ROMAI)

LISTA LUCRĂRILOR ȘTIINȚIFICE

Teza de doctorat

„Contribuții la studiul bifurcațiilor unor sisteme dinamice tridimensionale”, 2001,
Institutul de Matematică „Simion Stoilow” al Academiei Române, București.
Conducător de doctorat: Prof.Univ.Dr. Adelina Georgescu

Cărți si capitole în cărți publicate în edituri recunoscute

1. M. Sterpu, *Modelare algoritmică. Aplicații în C și Maple*, Editura Universitaria Craiova, Seria Publications of the Centre for Nonlinear Analysis and its Applications 10, 2006, p. 184+vi. ISBN 973-724-427-1, 978-973-742-427-3.
2. Mariana Popescu, M. Sterpu, *Geometrie analitică. Teorie și aplicații*, Editura Universitaria Craiova, 2004, p. 384. ISBN 973-8043-473-3.
3. Gh. Murărescu, M. Sterpu, *Teoria diferențială a curbelor și suprafețelor. Teorie și aplicații*, Editura Universitaria Craiova, 2003, p. 203. ISBN 973-8043-345-5.
4. M. Sterpu, *Dinamică și bifurcație pentru două modele Van der Pol generalizate*, Editura Universității din Pitești, Seria Matematică Aplicată și Industrială 8 (2001), p. 237 +iv. ISBN 973-8212-55-3
5. M. Sterpu, C. Roșoreanu, *Modelarea și simularea proceselor economice*, Editura Universitaria Craiova, 2007.

Articole/studii în extenso, publicate în reviste din fluxul științific internațional principal

Articole care prezintă contribuții științifice originale, in extenso, publicate în reviste/volume cotate ISI

1. R. Efrem, M. Sterpu, D. Constantinescu, Stability and bifurcations in an epidemic model with nonlinear transmission and removal rates, *Carpathian Journal of Mathematics* 2025, 41(2), 329-349. Doi: 10.37193/CJM.2025.02.05 <https://doi.org/10.37193/CJM.2025.02.05> <https://www.webofscience.com/wos/woscc/full-record/WOS:001402765600001>
2. Mihaela Sterpu, Raluca Efrem, Local dynamics and bifurcation for a two-dimensional cubic Lotka-Volterra system (Part II), *Annals of the University of Craiova-Mathematics and Computer Science Series* 2024, 51(2), 561-576. <https://doi.org/10.52846/ami.v51i2.2070> <https://www.webofscience.com/wos/woscc/full-record/WOS:001390241700017>
3. G. Moza, C. Roșoreanu, M. Sterpu, R. Oliveira, Stability and bifurcation analysis of a four-dimensional economic model, *Carpathian Journal of Mathematics* 2024, 40(1), 139-153. Doi: 10.37193/CJM.2024.01.10
4. Mihaela Sterpu, Carmen Roșoreanu, Raluca Efrem, Sue Ann Campbell, Stability and Bifurcations in a Nutrient-Phytoplankton-Zooplankton Model with Delayed Nutrient Recycling with Gamma Distribution, *Mathematics* 2023, 11(13), Article 2911. <https://doi.org/10.3390/math11132911> WOS:001028450500001
5. Mihaela Sterpu, Carmen Roșoreanu, Georgeta Șoavă, Anca Mehedințu, A Generalization of the Grey Lotka-Volterra Model and Application to GDP, Export, Import and Investment for the European Union, *Mathematics* 2023, 11(15), Article 3351. <https://doi.org/10.3390/math11153351> WOS:001046433700001
6. Raluca Efrem, Mihaela Sterpu, Local dynamics and bifurcation for a two-dimensional cubic Lotka-Volterra system I, *Annals of the University of Craiova-Mathematics and Computer Science Series* 2023, 50(1), 247-258. <https://doi.org/10.52846/ami.v50i1.1779> <http://inf.ucv.ro/~ami/index.php/ami/article/view/1779> WOS:001026536900018
7. Gheorghe Moza, Mihaela Sterpu, Carmen Roșoreanu, An analysis of two degenerate double Hopf bifurcations, *Electronic Research Archive* 2022, 30(1), 382-403. doi: 10.3934/era.2022020 WOS:000806762600020
8. G Soava, A Mehedințu, M Sterpu, Analysis and Forecast of the Use of E-Commerce in Enterprises of the European Union States, *Sustainability* 2022, 14(14), 8943. <https://doi.org/10.3390/su14148943> WOS:000833763000001
9. Mehedințu A, Soava G, Sterpu M, Grecu E. Evolution and Forecasting of the Renewable Energy Consumption in the Frame of Sustainable Development: EU vs. Romania, *Sustainability* 2021, 13(18), 10327. <https://doi.org/10.3390/su131810327> WOS:000702106200001
10. Soava G, Mehedințu A, Sterpu M, Grecu E. The Impact of the COVID-19 Pandemic on Electricity Consumption and Economic Growth in Romania, *Energies* 2021, 14(9), 2394. <https://doi.org/10.3390/en14092394> WOS:000650159600001
11. Georgeta Soava, Anca Mehedințu, Mihaela Sterpu and Mircea Raduteanu. Impact of Employed Labor Force, Investment, and Remittances on Economic Growth in EU Countries, *Sustainability* 2020, 12 (23), 10141. doi:10.3390/su122310141 WOS:000597447800001
12. Soava, Georgeta; Mehedințu, Anca; Sterpu, Mihaela, Relations between income inequality, economic growth and poverty threshold: new evidences from EU countries panels, *Technological and Economic Development of Economy*, 26(1) (2020), 290-310; DOI: <https://doi.org/10.3846/tede.2019.11335> WOS: 000520025000001

13. Mehedintu, Anca; Soava, Georgeta; Sterpu, Mihaela. Remittances, Migration and Gross Domestic Product from Romania's Perspective, *Sustainability* 2020, 12(1), 212. WOS: 000521955600212, <https://doi.org/10.3390/su12010212>.
14. Mehedintu, Anca; Soava, Georgeta; Sterpu, Mihaela. The Effect of Remittances on Poverty in the Emerging Countries of the European Union, *Sustainability* 2019, 11(12), 3265. <https://doi.org/10.3390/su11123265> WOS:000473753700035
15. Carmen Roșoreanu, Mihaela Sterpu. Approximations of the heteroclinic orbits near a double-zero bifurcation with symmetry of order two. Application to a Lienard equation, *International Journal of Bifurcation and Chaos* 29(6) (2019), 1950074 (11 pages). <https://doi.org/10.1142/S0218127419500743> WOS:000475470500004
16. Sterpu, Mihaela; Soava, Georgeta; Mehedintu, Anca, Impact of Economic Growth and Energy Consumption on Greenhouse Gases Emissions: Testing Environmental Curves Hypotheses on EU Countries, *Sustainability* 10(9) (2018), Article Number: 3327 (14 pages) <https://doi.org/10.3390/su10093327> WOS:000446770200370
17. Soava, Georgeta; Mehedintu, Anca; Sterpu, Mihaela, Impact of Renewable Energy Consumption on Economic Growth: Evidence from European Union Countries, *Technological and Economic Development of Economy*, 24(3) (2018), 914-932; DOI: <https://doi.org/10.3846/tede.2018.1426> WOS:000442131100005
18. Mehedintu, Anca; Sterpu, Mihaela; Soava, Georgeta, Estimation and Forecasts for the Share of Renewable Energy Consumption in Final Energy Consumption by 2020 in the European Union, *Sustainability* 10(5) (2018), 1515 (20 pages) <https://doi.org/10.3390/su10051515> WOS:000435587100211
19. Carmen Roșoreanu, Mihaela Sterpu. Approximations of the homoclinic orbits near a double-zero bifurcation with symmetry of order two, *International Journal of Bifurcation and Chaos*, 27(7) (2017), 175109 (10 pages). <https://doi.org/10.1142/S0218127417501097> WOS:000406272200015
20. Denis de Carvalho Braga, Luis Fernando Mello, Carmen Roșoreanu and Mihaela Sterpu Controllable Hopf bifurcations of codimension one and two in linear control systems, *International Journal of Bifurcation and Chaos*, Vol. 21, Issue: 9 (September 2011), p. 2665-2678. DOI: 10.1142/S0218127411030015 WOS:000297068700018
21. Denis de Carvalho Braga, Luis Fernando Mello, Carmen Roșoreanu and Mihaela Sterpu Controllable Hopf bifurcations of codimension 1 and 2 in nonlinear control systems, *Nonlinear Analysis: Theory, Methods & Applications*, 74 (9) (2011), p. 3046-3054. DOI: 10.1016/j.na.2011.01.033 WOS:000288239400013
22. Denis de Carvalho Braga, Luis Fernando Mello, Carmen Roșoreanu and Mihaela Sterpu Control of planar Bautin bifurcation, *Nonlinear Dynamics*, vol. 62 (4) (2010), p. 989-1000 DOI: 10.1007/s11071-010-9779-2 WOS:000283590100025
23. C. Roșoreanu, M. Sterpu, L.F. Mello and D. Braga. Lyapunov coefficients for non-symmetrically coupled identical dynamical systems. Application to coupled advertising models, *Discrete and Continuous Dynamical Systems - Series B*, Vol. 11 (2009), Issue 3, p. 785-803. ISSN 1531-3492. DOI: 10.3934/dcdsb.2009.11.785 WOS:000265190600011
24. C. Roșoreanu, M. Sterpu. First Liapunov coefficient for coupled identical oscillators. Application to coupled demand-supply model, *Mathematical Methods in Applied Sciences*, Wiley Publ, 29(17), (2006), p. 2037-2046. DOI: 10.1002/mma.762, WOS:000242130500002
25. M. Sterpu, C. Roșoreanu. Hopf bifurcation in a system of two coupled advertising oscillators, *Nonlinear Analysis: Real World Applications*, Elsevier, 6 (2005), no. 1, p. 1-12. WOS:000225680000001
26. M. Sterpu, C. Roșoreanu. Stability and Hopf bifurcation for Two Advertising Systems, Coupled with Delay, in: *Numerical Analysis and Applied Mathematics*, International Conference on Numerical Analysis and Applied Mathematics, Corfu, Greece, September 2007, AIP Conference Proceedings 936, Amer. Inst. Phys., Melville, NY, 2007 (editor: Th. Simos), pp. 535-538. ISBN 978-0-7354-0447-2; ISSN 0094-243X; WOS:000250405200131
27. M. Sterpu, C. Roșoreanu. Bifurcation in coupled Hopf oscillators, in: *Mathematical Analysis and Applications*, International Conference of Mathematical Analysis and Applications, Craiova, Romania 2005, AIP Conference Proceedings 835, Amer. Inst. Phys., Melville, NY, 2006 (editors: C. Niculescu, V. Rădulescu), p. 133-142. ISBN 0-7354-0328-7; ISSN 0094-243X; MR2258650, WOS:000237670200013
28. C. Roșoreanu, M. Sterpu. Local bifurcations in the FitzHugh-Nagumo System, in: *Analysis and Optimization of Differential Systems*, Viorel Barbu, Irena Lasiecka, Dan Tiba, Constantin Varsan (Eds.), IFIP TC7/WG7.2 International Working Conference on Analysis and Optimization of Differential Systems, September 10-14, 2002, Constanta, Romania. IFIP Conference Proceedings 249, Kluwer, 2003, p. 345-356. ISBN 1-4020-7439-5; MR1993727 (2004f:34059), Zbl 01984114, DBLP Bibliography Server WOS:000183539500035
29. Soava, Georgeta; Mehedintu, Anca; Sterpu, Mihaela. The effect of remittances on economic growth in the emerging countries of the European Union, *Conference Proceedings, International Conference on New Trends in Sustainable Business and Consumption, BASIQ 2019, Bari, Italy, May 30 - June 1, 2019*, pp. 175-182, ISSN: 2457-483X, WOS: 000478861800020

Articole publicate în reviste românești indexate ISI

30. M. Sterpu, C. Roșoreanu, Two approximations of homoclinic bifurcation curves in the FitzHugh-Nagumo system, *Annals of University of Craiova, Math.Comp.Sci.Ser.*, 30 (2003), no. 2, p. 166-174. MR2064636, Zbl 1073.34510
31. M. Sterpu. Saddle-node bifurcations for the FitzHugh-Nagumo model, *Math. Reports, Acad. Rom.*, 4(54) (2002), no. 3, p. 289-295 (2003). MR2067640, Zbl 1085.34524
32. M. Sterpu. A double-zero with symmetry of order two bifurcation in the FitzHugh-Nagumo model, *Analele Universității Craiova, Seria Matematică-Informatică*, 29, 2002, p. 130-136. MR2064907, <https://zbmath.org/1119.37313>
33. M. Sterpu, A. Georgescu. Codimension three bifurcations for the FitzHugh-Nagumo system, *Mathematical Reports (Bucur.)*, Acad. Rom., 3(53), 3 (2001), p. 287-292. MR1929540 (2003j:34068), Zbl 1068.34507

34. M. Sterpu, A. Georgescu, P. Băzăvan. Dynamics generated by the generalised Rayleigh equation II. Periodic solutions, Mathematical Reports, Acad. Rom., 2(52), 3 (2000), p. 367-378. MR1889619 (2003i:34111), Zbl 1026.34049A.
35. P. Băzăvan, M. Sterpu. A numerical convexity invariant for plane domains, Analele Universității Craiova, Seria Matematică-Informatică, XXV (1998), p. 87-92. MR1825415, Zbl 1025.65014
36. M. Sterpu. Regression with a unit-vector type function on a Riemann space, Analele Universității Craiova, Seria Matematică-Informatică, XXIV (1997), p. 127-136. MR1674986 (2000c:62098), Zbl 1053.62540
37. F. Gorunescu, M. Gorunescu, M. Sterpu. Note on a test involving repeated trials for the hit or miss Monte Carlo integration, Analele Universității Craiova, Seria Matematică-Informatică, vol. XXI (1994), p. 42-50. MR1651977, Zbl 1053.65502
38. F. Gorunescu, M. Gorunescu, M. Sterpu. Hit or miss Monte Carlo simulation for improper integrals, Analele Universității Craiova, Seria Matematică-Informatică, vol. XX (1993), p. 22-26. MR1652747, Zbl 1053.65503.

Articole publicate in reviste indexate BDI

39. Mehedintu Anca, Soava Georgeta, Sterpu Mihaela, Rocsoreanu Carmen- Study of the Relationship between Income Inequality and the Poverty Risk Threshold at the European Union Countries, Proceedings of the 18th International Conference on INFORMATICS in ECONOMY (IE 2019), 2019, ISSN 2284-7472, Bucharest University of Economic Studies Press, pag. 447-452.
40. Carmen Rocsoreanu, Mihaela Sterpu. Homoclinic and Heteroclinic Orbits for a Liénard System, Journal of Informatics and Mathematical Sciences 10(4) (2018), 563-571.
41. Carmen Rocsoreanu, Mihaela Sterpu. Second order approximations of the homoclinic solutions for the FitzHugh-Nagumo system, ROMAI Journal 2016/2, 161-172. <https://zbmath.org/1424.37014>
42. Carmen Rocsoreanu, Mihaela Sterpu. Bifurcation in a nonlinear business cycle model, ROMAI Journal 2009/2, Pages 145-152, ISSN 1841-5512. <https://zbmath.org/1265.34300>
43. Adelina Georgescu, Petre Bazavan, Mihaela Sterpu. Approximate limit cycles for the Rayleigh model, ROMAI Journal 2008/2, Pages 73-80, ISSN 1841-5512. <https://zbmath.org/1265.34117>
44. M. Coşulschi, M. Sterpu. Algorithms for optimally computing in-line visibility and their applications, Analele Universității A.I. Cuza Iași, Seria Informatică, vol. XVI (2006), p. 39-50. (DBLP Bibliography Server) MR2536959
45. M. Sterpu, C. Rocşoreanu. Stability and fold bifurcation in a system of two coupled demand-supply models, Buletinul Academiei de Ştiinţe a Republicii Moldova, Matematica, 3 (46), (2004), p. 53-62. Zbl pre02187107
46. M. Sterpu, A. Georgescu. Codimension one bifurcations for a Rayleigh model, Bulletin of Academy of Sciences of Moldova, Mathematics, 38, 1 (2002), p. 69-76. MR1954224, 2003m:34095, Zbl 1042.34073
47. M. Sterpu. Dynamics generated by the generalised Rayleigh equation I. The unforced case, Analele Universității de Vest Timişoara, Seria Matematică-Informatică, 39, 2 (2001), p. 147-154. MR2023931, Zbl 1054.34070
48. M. Sterpu. Computational methods to construct juxtaposition fractals, Analele Universității de Vest Timişoara, Seria Matematică-Informatică, 39, 1 (2001), p.157-170. MR2020103, Zbl 1049.28009
49. Georgescu, M. Sterpu. Dynamics and Bifurcations in the Periodically Forced FitzHugh-Nagumo System, Int. J. Chaos Theory and Applications, 5, 2 (2000), p. 63-80.
50. M. Sterpu, A. Georgescu. Codimension three bifurcations for a FitzHugh-Nagumo like system, Buletinul Ştiinţific al Universității Piteşti, Seria Matematică-Informatică, 4 (2000), p. 193-197.
51. M. Sterpu, P. Băzăvan. Period doubling bifurcations for a periodically forced Rayleigh equation, Buletinul Ştiinţific al Universității Piteşti, Seria Matematică-Informatică, 4 (2000), p. 187-191.
52. M. Sterpu, P. Băzăvan. Study on a Rayleigh equation, Buletinul Ştiinţific al Univ. Piteşti, Seria Matematică-Informatică, 3 (1999), 429-434.

Articole publicate in volume ale unor conferințe internaționale

53. C. Rocsoreanu, M. Sterpu. Fold and Hopf bifurcations in non-symmetrically coupled dynamical systems, The 14th Conference On Applied and Industrial Mathematics, Satellite Conference of ICM 2006, Chişinău, Rep. Moldova, 17-19 august 2006, p. 301-302, ISBN 978-9975-9690-1-7.
54. M. Sterpu, C. Rocşoreanu. Nonhyperbolic singularities in a system of two coupled offer - request models, Second Conference of the Mathematical Society of Moldavia, Chişinău, Rep. Moldova, August 17-19, 2004, p. 303-304, ISBN 9975-62-110-4.
55. C. Rocşoreanu, M. Sterpu, Nonhyperbolic singularities in a system of coupled oscillators, Proc. Of the 11th Conference On Applied and Industrial Mathematics, CAIM 2003, Universitatea din Oradea, Romania, 2003, p. 101-107.
56. F. Gorunescu, M. Gorunescu, M. Sterpu. A comparative analysis of Monte Carlo estimations of areas and volumes for free boundary domains, Proceedings of the Eight International Symposium on Applied Stochastic Models and Data Analysis (ASMDA '97), Anacapri/Napoli, Italy, 11 - 14 June 1997 (Eds. J. Janssen, C. Lauro), vol. 8 (1997), p. 193-198, 1997.
57. Mehedintu Anca, ROCSOREANU CARMEN, Sterpu Mihaela, Soava Georgeta, Study of the Relationship between Income Inequality and the Poverty Risk Threshold at the European Union Countries, Proceedings of the 18th International Conference on INFORMATICS in ECONOMY (IE 2019), Bucharest University of Economic Studies Press, p. 447-452, ISSN 2284-7472, ISSN-L: 2247-1480.
58. Mehedințu, A., Şoavă, G., Sterpu, M., Răduţeanu, M., Evolution and Trends of the Remittances from the Perspective of Romania, ISSD, 2019, pp. 481-484, Proceedings of the International Scientific Conference "Information Society and Sustainable Development", VIth edition, May 10-11, 2019, Targu-Jiu, Romania, Academica Brâncuşi Publishing House, ISBN: 978-973-144-889-3.

59. Șoavă, G., Mehedințu, A., Sterpu, M., Răduțeanu, M., The impact of labor force, investment and remittances on economic growth at european union countries, ISSD, 2020, pp. 315-319, Proceedings of the International Scientific Conference "Information Society and Sustainable Development", VIIth edition, September 11-12, 2020, Targu-Jiu, Romania, Academica Brâncuși Publishing House, ISBN: 978-973-144-889-3.

Participări cu comunicări la conferințe internaționale

1. Mihaela Sterpu, Several double degenerate Hopf-Hopf bifurcations, The International Conference on Dynamical Systems: Qualitative Theory, Bifurcation Theory and Applications, September 10-14 June, 2025, Jiao-Tong University, Shanghai, China.
2. Carmen Roșoreanu and Mihaela Sterpu, A multiple degenerate Hopf-Hopf bifurcation. Application to a finance model, The 32th Edition of the Annual Conference on Applied and Industrial Mathematics- CAIM 2024, 18-21 sept. 2025, București.
3. Mihaela Sterpu, Bifurcation Diagrams for a Cubic Kolmogorov System, Dynamical Systems and Applications, The First Workshop within the DSYREKI Project, 27-28 June, 2025, University of Maribor, Slovenia.
4. Mihaela Sterpu, Some nongeneric double-Hopf bifurcations, Dynamical Systems, Reaction Kinetics and Applications, The Second Workshop within the DSYREKI Project, 2-5 July, 2025, University of Zagreb, Croatia.
5. Mihaela Sterpu, Raluca Efrem, and Carmen Roșoreanu, Local dynamics in a closed ecosystem model, The 5th Edition of the International Conference on Applied Mathematics and Numerical Methods - ICAMNM 2024, 25-26 oct. 2024, Craiova.
6. Carmen Roșoreanu and Mihaela Sterpu, Application of a generalization of the Grey Lotka-Volterra model to an economic model, The 31th Edition of the Annual Conference on Applied and Industrial Mathematics- CAIM 2024, 14-17 sept. 2024, Oradea.
7. Raluca Efrem, Mihaela Sterpu, and Dana Constantinescu, Local Stability in a SEIR Type Epidemic Model, The 31th Edition of the Annual Conference on Applied and Industrial Mathematics- CAIM 2024, 14-17 sept. 2024, Oradea.
8. Mihaela Sterpu, Raluca Efrem, and Carmen Roșoreanu, Stability and bifurcations in a model from ecology, The 30th Edition of the Annual Conference on Applied and Industrial Mathematics- CAIM 2023, 14-17 sept. 2023, Iași.
9. Mihaela Sterpu and Carmen Roșoreanu, *Study of a 3D system modeling tumor immunotherapy*, The 4th Edition of the International Conference on Applied Mathematics and Numerical Methods - ICAMNM 2022, 29 iunie-1 iulie 2022, Craiova.
10. Mihaela Sterpu and Carmen Roșoreanu, *Control of an economic dynamical system*, The 3th Edition of the International Conference on Applied Mathematics and Numerical Methods - ICAMNM 2020, 29-31 oct. 2020, Craiova.
11. Carmen Roșoreanu and Mihaela Sterpu, Some types of behavior for a degenerate double Hopf bifurcation, The 27th Edition of the Annual Conference on Applied and Industrial Mathematics- CAIM 2019, 19-22 sept. 2019, Târgoviște.
12. Mihaela Sterpu and Carmen Roșoreanu, Homoclinic and heteroclinic orbits for a Liénard system, 5th International Congress on Fundamental and Applied Sciences, June 18-22, 2018, Skopje, Macedonia.
13. Carmen Roșoreanu and Mihaela Sterpu, Heteroclinic orbits corresponding to a double-zero bifurcation with symmetry of order two, The 25th Edition of the Annual Conference on Applied and Industrial Mathematics- CAIM 2017, 21-24 sept. 2017, Iași.
14. Carmen Roșoreanu and Mihaela Sterpu, Second order approximations of the homoclinic solutions for the FitzHugh-Nagumo system, The 24th Edition of the Annual Conference on Applied and Industrial Mathematics- CAIM 2016, 15-18 sept. 2016, Craiova.
15. Carmen Roșoreanu and Mihaela Sterpu, Approximations of the homoclinic solutions for the FitzHugh-Nagumo system, The 23th Edition of the Annual Conference on Applied and Industrial Mathematics- CAIM 2015, 17-23 sept. 2015, Suceava.
16. Mihaela Sterpu, Carmen Roșoreanu, Control of Hopf bifurcation control in finite dimensional dynamical systems, The 19th Conference on Applied and Industrial Mathematics, CAIM 2011, Iași
17. Carmen Roșoreanu, Mihaela Sterpu: Control of planar Bautin bifurcation, The 17th Conference On Applied and Industrial Mathematics, CAIM 2009, Universitatea navală "Mircea cel Bătrân" din Constanța, Romania, 17-20 septembrie 2009.
18. M. Sterpu, C. Roșoreanu. Bifurcation in a nonlinear business cycle model. The 16th Conference On Applied and Industrial Mathematics, CAIM 2008, Universitatea Agora din Oradea, Romania, 9-11 octombrie 2008.
19. Sterpu M., Roșoreanu C., Stability and Hopf bifurcation in a nonlinear IS-LM model with time delay. Applications, The International Conference of Differential Geometry and Dynamical Systems DGDS 2008, Mangalia, August 29 - September 2, 2008.
20. Roșoreanu C., Sterpu M. - Hopf bifurcation for coupled identical dynamical systems. Applications, 6-th International Congress of Romanian Mathematicians, București, 28 iunie-4 iulie, 2007 (Abstract pag. 135)
21. Sterpu M., Roșoreanu C., - Stability and Hopf Bifurcations for Two Advertising Systems, Coupled with Delay, International Conference on Nonlinear Analysis and Applied Mathematics, Grecia, 16-20 sept. 2007
22. C. Roșoreanu, M. Sterpu. Fold and Hopf bifurcations in non-symmetrically coupled dynamical systems, The 14th Conference On Applied and Industrial Mathematics, CAIM 2006, Universitatea din Stat din Chișinău, Rep. Moldova, 17-19 august 2006.
23. C. Roșoreanu, M. Sterpu. Liapunov coefficients in non-symmetrically coupled systems, International Conference On Applied Analysis and Differential Equations, Universitatea din Iasi, 4 -9 septembrie 2006.
24. C. Roșoreanu, M. Sterpu. Center manifold for a coupled Hopf oscillators, The 13th Conference On Applied and Industrial Mathematics, CAIM 2005, Universitatea din Pitești, Romania, 15-17 octombrie 2005.
25. M. Sterpu, C. Roșoreanu. Nonhyperbolic singularities in a system of two coupled offer - request models, Second Conference of the Mathematical Society of Moldavia, Chișinău, Rep. Moldova, August 17-19, 2004.
26. C. Roșoreanu, M. Sterpu. Bifurcation in a system of two coupled offer - request models, 7e Colloque Franco-Roumain de Mathematiques Appliquees, Craiova, 1-4 Sept., 2004.

27. M. Sterpu. An alternate proof for the Bogdanov-Takens for a demand-supply model, The 12th Conference On Applied and Industrial Mathematics, CAIM 2004, Universitatea din Pitești, Romania, 15-17 octombrie 2004.
28. M. Sterpu, C. Roșoreanu. Bifurcation for coupled Hopf oscillators, Conferinta de Analiza matematica Craiova, 23-24 Sept., 2005.
29. M. Sterpu, C. Roșoreanu. Bifurcations in a system of two coupled oscillators, The 5 th Congress of romanian mathematicians, Universitatea din Pitesti, iunie 2003. <http://www.math.upit.ro/programme.pdf>
30. C. Roșoreanu, M. Sterpu. Bifurcations in a system of coupled oscillators, The 11th Conference On Applied and Industrial Mathematics, CAIM 2003, Universitatea din Oradea, Romania, 29-31 mai 2003.
31. C. Roșoreanu, M. Sterpu. An overview on dynamic bifurcations in the FitzHugh-Nagumo System, Int. Conference on Analysis and Optimisation of Differential Systems, Universitatea "Ovidius" din Constanța, Romania, Sept. 10-14, 2002.
32. M. Sterpu, C. Roșoreanu. Two approximations of homoclinic bifurcation curves for the FitzHugh-Nagumo system, The 10th Conference On Applied and Industrial Mathematics, CAIM 2002, Universitatea din Pitești, Romania, 12-14 oct. 2002.
33. M. Sterpu, A. Georgescu. Codimension one bifurcations for the periodically forced Rayleigh model First Conference of the Mathematical Society of Moldavia, Chișinau, Rep. Moldova, August 16-18, 2001.
34. M. Sterpu, P. Bazavan. Alternance between periodic and chaotic attractors in a Rayleigh model The 9th Conference On Applied and Industrial Mathematics, CAIM 2001, Universitatea din Pitești, Romania, oct. 2001.
35. M. Sterpu. On a cusp bifurcation in the FitzHugh-Nagumo model, A V-a Conferinta Nationala de Analiza Matematica si Aplicatii, Universitatea din Craiova, noiembrie 2001.
36. A. Georgescu, M. Sterpu, P. Bazavan. Approximate limit cycles for the Rayleigh model. The 8th Conference on Applied and Industrial Mathematics, CAIM 2000, Universitatea din Pitești, Romania, 13-15 Oct. 2000.
37. M. Sterpu, P. Bazavan. Some bifurcations for the forced Rayleigh equation The 7th Conference on Applied and Industrial Mathematics, CAIM 99, Universitatea din Pitești, Romania, 15-17 Oct. 1999.
38. M. Sterpu, A. Georgescu. Codimension three bifurcations for a FitzHugh-Nagumo like model The 7th Conference on Applied and Industrial Mathematics, CAIM 99, Universitatea Pitești, Romania, 15-17 Oct., 1999.
39. F. Gorunescu, M. Gorunescu, M. Sterpu, A. Prodan. Fiabilitatea procesării imaginilor ecografice computerizate prin metoda hit or miss Monte Carlo, Volumul Simpozionului "Zilele UMF -Craiova", p. 173, 1999.
40. M. Sterpu, P. Bazavan. Hit or miss Monte Carlo simulation for evaluating the fractal dimension, Annual Scientific Conference GAMM 98, University of Bremen, 1998. www.zarm.uni-bremen.de/gamm98/sitzungen/so3.html
41. M. Sterpu, P. Bazavan. Study on a Rayleigh equation The 6th Conf. on Applied and Industrial Mathematics, CAIM 98, Universitatea din Pitești, Romania, 16-18 Oct., 1998.
42. F. Gorunescu, M. Gorunescu, M. Sterpu. A comparative analysis of Monte Carlo estimations of areas and volumes for free boundary domains, Eight International Symposium on Applied Stochastic Models and Data Analysis (ASMDA '97), Anacapri/Napoli, Italy, 11 - 14 iunie 1997.

Participări în proiecte de cercetare

- P1. Membru în Grant CNCSIS /2007: Bifurcații în sisteme dinamice cuplate și în sisteme cu argument întârziat. Aplicații la modele economice. Director: conf. Dr. Carmen Roșoreanu
- P2. Membru în Grant CNCSIS 80/2006, tema 21: Integrarea în spațiul European a învățământului masteral românesc: promovarea cercetării interdisciplinare prin studiul analizei neliniare și a problemelor de evoluție. Director: prof.dr. Constantin P. Niculescu
- P3. Membru în Grant CNCSIS 80/2005, tema 14: Integrarea în spațiul European a învățământului masteral românesc: promovarea cercetării interdisciplinare prin studiul analizei neliniare și a problemelor de evoluție. Director: prof.dr. Constantin P. Niculescu
- P4. Membru în Grant Ministerul Educației 1994: Metode geometrice în statistică și dinamica statistică. Tema: Subvarietăți de regresie. Director: prof.dr. Valentin Boju
- P5. Membru în proiect HORIZON2020-2017-RISE-777911: Dynamics. Director: conf. dr. Gheorghe Tigan
- P6. Expert în PROIECT: POCU/379/6/21/125094 "Student antreprenor în cadrul Facultăților de Științe și Inginerie", Proiect co-finanțat din Programul Operațional Capital Uman 2014-2020. Director: conf. dr. Daniela Roșca
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