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## **ΔΗΜΟΣΙΕΥΣΕΙΣ σε περιοδικά με κριτές**

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1. **Patsis, P. A. & Zachilas, L.**: 1990, "Complex Instability Of Simple Periodic-Orbits In A Realistic 2-Component Galactic Potential", Astron. & Astroph., **227**, 37 (ISI, Scopus, Im. Factor: **4,410**)
2. **Zachilas, L. & Farantos, S. C.**: 1991, "Periodic-Orbits and Quantum Localization in the van der Waals System Co-Ar", Chem. Phys., **154**, 55 (ISI, Scopus, Im. Factor: **2,017**)
3. **Zachilas, L.**: 1993, "Complex Instability", Astron. & Astroph. Suppl. Series, **97**, 549 (ISI, Scopus, Im. Factor: **4,410**)
4. **Farantos, S. C. & Zachilas, L.**: 1993, "Testing Molecular-Potential Functions with Bifurcation Diagrams of Periodic-Orbits", Molec. Phys., **80**, No 6, 1499 (ISI, Scopus, Im. Factor: **1,743**)
5. **Patsis, P. A. & Zachilas, L.**: 1994, "Using Color and Rotation for Visualizing 4-Dimensional Poincaré Cross-Sections - with Applications to the Orbital

*Behavior of a 3-Dimensional Hamiltonian System*", Int. J. of Bifurcation & Chaos, **Vol. 4**, No. 6, 1399 – 1424 (ISI, Scopus, Im. Factor: **0,920**)

6. **Zachilas L.**: 2010a, "A review study of the 3-particle Toda lattice and higher order truncations: The odd-order cases (Part I)", Int. J. of Bifurcation & Chaos, **Vol. 20**, No. 10, 3007 – 3064 (ISI, Scopus, Im. Factor: **0,920**)
7. **Zachilas L.**: 2010b, "A review study of the 3-particle Toda lattice and higher order truncations: The even-order cases (Part II)", Int. J. of Bifurcation & Chaos, **Vol. 20**, No. 11, 3391 – 3441 (ISI, Scopus, Im. Factor: **0,920**)
8. **Zachilas L. & Gkana A.**: 2011, "Nonlinear Supply and Demand Model with Two Interrelated Markets", J. of Eng. Sci. & Tech. Rev., **4** (3), 227 – 232
9. **Zachilas L. & Psarianos, I.**: 2012, "Examining the chaotic behavior of dynamical systems by means of the 0-1 test", Journal of Applied Mathematics, vol. 2012, Article ID 681296, 14 pages.  
doi: 10.1155/2012/681296 (ISI, Scopus, Im. Factor: **0,630**)

10. **Zachilas, L., Patsis, P.A. & Katsanikas, M.**: 2013, "The structure of phase space close to fixed points in a 4D symplectic map", Int. J. of Bifurcation & Chaos, **Vol. 23**, No. 7, 1330023 (ISI, Scopus, Im. Factor: **0,920**)
11. **Gkana A. & Zachilas L.**: 2013, "Incorporating prey refuge in a prey-predator model with Holling type I functional response: Random dynamics and population outbreaks", J. Biol. Phys., 39(4), 587-606 (ISI, Scopus, Im. Factor: **1,864**)  
(DOI 10.1007/s10867-013-9319-7)
12. **Gkana A., Zachilas L. & Arvanitidis P.**: 2013, "Complex Dynamics in non-linear Real Estate Models", Int. J. of Nonlinear Sci. Numer. Simul., Vol. 14, issue 3-4, 225-246 (ISI, Scopus, Im. Factor 2012: **0,622**), (5-year Impact Factor: **1,144**), (DOI 10.1515/ijnsns-2013-0018)

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## **ΔΗΜΟΣΙΕΥΣΕΙΣ σε πρακτικά συνεδρίου με κριτές**

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1. **Contopoulos, G. & Zachilas, L.**: 1988, "Complex instability in 3D systems" in "Singular behavior and Nonlinear Dynamics", Samos 1988, Pneumatikos, St., Bountis, A. & Pneumatikos, Sp. (eds.)
2. **Patsis, P. A. & Zachilas, L.**: 1988, "Complex Instability of Simple Periodic Orbits in a Realistic Galactic Potential", in "The World of Galaxies", Paris, Corwin, H. & Bottinelli, L. (eds.)
3. **Patsis, P. A. & Zachilas, L.**: 1994, "A method for visualizing the 4-D space of section in 3-D Hamiltonian systems", in "Integrability and Chaotic Behavior", Torun, Kluwer Publications NATO Asi Series B, Physics, Vol. 331, J. Seimenis et al., pg. 399
4. **Zachilas, L., Patsis, P.A. & Mavrommatis, C.**: 2007, "The Society for Space and Astronomy at Volos, Greece", in Communicating Astronomy with the Public 2007: Proceedings from the IAU/National Observatory of Athens/ESA/ESO

Conference, Athens, Greece, 8-11 October 2007, Christensen L. L., Zoulias M. & Robson, I. (eds.), published by Eugenides Foundation, pg. 540

5. **Katsanikas, M., Patsis, P.A. & Zachilas, L.**: 2009, "The Structure of the Phase Space in Galactic Potentials of Three Degrees of Freedom", Proceedings of "Chaos in Astronomy, Astrophysics and Space Science", G. Contopoulos, P.A. Patsis (eds.), Springer-Verlag, pg. 235
6. **Zachilas L.**, Kontaxi M. & Psarianos I.: 2011, "Students' Intrinsic and Extrinsic Aspirations in Greek Culture", (submitted to Sixth Self Biennial International Conference and accepted in POSTER session, due to large number of submitted papers)

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## ΜΟΝΟΓΡΑΦΙΕΣ

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1. **Ζαχείλας Λ.**: 1988, "Αριθμητική και Θεωρητική Μελέτη Τρισδιάστατων Αστρικών Συστημάτων", Διδακτορική Διατριβή, Φυσικό Τμήμα, Πανεπιστήμιο Αθηνών

2. **Ζαχείλας Λ.**: 1999, Σημειώσεις μαθήματος Πληροφορικής I, «*FORTRAN 90 και εφαρμογές για Πολιτικούς Μηχανικούς*», σ.σ. 38, Εκδόσεις Πανεπιστημίου Θεσσαλίας
3. **Ζαχείλας Λ.**: 1999, Σημειώσεις μαθήματος Πληροφορικής II, «*FORTRAN 90 και εφαρμογές για Πολιτικούς Μηχανικούς*», σ.σ. 74, Εκδόσεις Πανεπιστημίου Θεσσαλίας
4. **Ζαχείλας Λ.**: 2011, “*Υπολογιστικές Μέθοδοι με τη χρήση του Maxima*”, Σημειώσεις χρήσης του Maxima για τους φοιτητές 1ου και 4ου έτους, και για τους μεταπτυχιακούς φοιτητές του ΠΜΣ του ΤΟΕ, σσ. 254, 2<sup>η</sup> εκδ.