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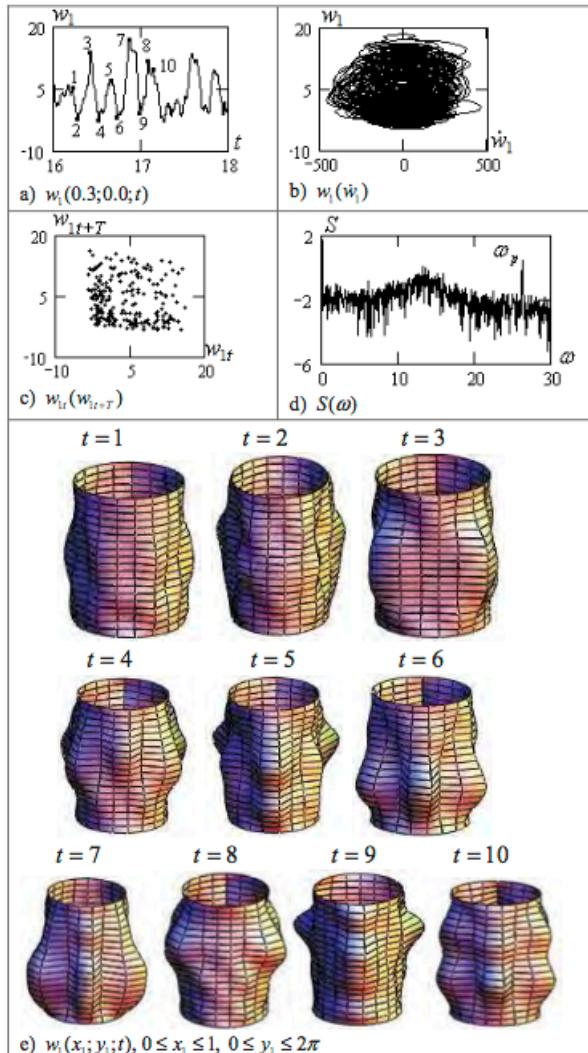


Figure 5. Spatial-timing characteristics of the shell chaotic dynamics

From: A.V. Krysko, J. Awrejcewicz, I.V. Papkova, V.M. Zakharov, T.V. Yakovleva and V.A. Krysko, “Non-linear dynamics of multi-layer shells, Unidentified chapter in unidentified book in the pdf file, January 2013, DOI: 10.13140/2.1.2092.7043

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 National Research Tomsk Polytechnic University, Tomsk, Russian Federation
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Selected Publications:

Books:

Jan Awrejcewicz, V.A. Krysko, A.V. Krysko, Thermo-Dynamics of Plates and Shells, Springer-Verlag, 2007, 777 pages

Journal Articles, etc.:

J. Awrejcewicz, A. Krysko, V. Krysko, "Non-symmetric oscillations and transition to chaos in freely supported flexible plate sinusoidally excited, In: J. Awrejcewicz, J. Grabski and J. Mrozowski (editors), Proceedings of the 5th Conference on Dynamical Systems – Theory and Applications, Lodz, Poland, December 6-8, 1999, pp 95-103

J. Awrejcewicz, V.A. Krysko and A.V. Krysko, "Symmetric and non-symmetric oscillations and bifurcations of periodically excited plates with non-homogeneous boundary conditions", Computational Methods for Shell and Spatial Structures, IASS-IACM 2000, M. Papadrakakis, A. Samartin and E. Onate (Editors), Athens, Greece 2000

Awrejcewicz J., Krysko V.A., Krysko A.V., 2001, Regular and chaotic behaviour of flexible plates, Third Int. Conf. Thin-Walled Structures, Elsevier, 349-356

Awrejcewicz J., Krysko V.A., Krysko A.V.: Spatio-temporal chaos and solitons exhibited by von Kármán model. Int. J. Bifurc Chaos. 12, 1465–1513 (2002)

J. Awrejcewicz, V.A. Krysko and A.V. Krysko, "Complex parametric vibrations of flexible rectangular plates, Meccanica, Vol. 39, No. 3, pp 221-244, 2004

Vadim A. Krysko, Jan Awrejcewicz, Natalya E. Saveleva and Anton C. Krysko, "On the Sharkovskiy's periodicity for differential equations governing dynamics of flexible shells", Eighth Conference on Dynamical Systems Theory and Applications, December 12-15, 2005, Lodz, Poland

V.A. Krysko, J. Awrejcewicz, N.E. Saveleva and A.V. Krysko, "Dynamics of flexible shells and Sharkovskiy's periodicity", in: Differential Equations and Nonlinear Mechanics, 8 pages, September 2006, DOI:10.1155/DENM/2006/59709)

J. Awrejcewicz, A.V. Krysko, M.V. Zhigalov, O.A. Saltykova and V.A. Krysko, "Chaotic vibrations in flexible multi-layered Bernoulli-Euler and Timoshenko type beams", Latin American Journal of Solids and Structures, Vol. 5, No. 4, pp 319-363, 2008

A.V. Krysko, J. Awrejcewicz, I.V. Papkova, Chaotic vibrations of sector-type spherical shells, Journal of Computational and Nonlinear Dynamics 3 (2008) 041005 (17 pp).

Jan Awrejcewicz and A.V. Krysko, "Dynamic loss of stability of rectangular shells", Chapter 4 in Understanding Complex Systems, April 2008, DOI: 10.1007/978-3-540-77676-5_5

A.V. Krysko, J. Awrejcewicz, E.S. Kuznetsova, V.A. Krysko, Chaotic vibrations of closed cylindrical shells in a temperature field, Shock and Vibration 15 (2008) 335–343.

A.V. Krysko, J. Awrejcewicz, E.S. Kuznetsova, V.A. Krysko, Chaotic vibrations of closed cylindrical shells in a temperature field, International Journal of Bifurcation and Chaos 18 (2008) 1515–1529.

J. Awrejcewicz, V. Soldatov, E.S. Kuznetsova, A.V. Krysko and V.A. Krysko, "Regular and chaotic dynamics of simply supported cylindrical panels", 10th Conference on Dynamical Systems Theory and Applications, December 7-10, 2009, Lodz, Poland

A.V. Krysko, M.V. Zhigalov and V.V. Soldatov, "Analysis of chaotic vibrations for the distributed systems in the form of the Bernoulli-Euler beams using the wavelet transform", in: Structural Mechanics and Strength of Flight Vehicles, ISSN 1068-7998, Russian Aeronautics (Izv. VUZ) Vol. 52, No. 4, pp 399-407, 2009

A.V. Krysko, M.I. Koch, T.V. Yakovleva, U. Nackenhorst and V.A. Krysko, "Chaotic nonlinear dynamics of

cantilever beams under the action of signs-variables loads”, PAMM, Special Issue: 82nd Annual Meeting of the International Association of Applied Mathematics and Mechanics (GAMM), Vol. 11, No. 1, pp 327-328, 2011
J. Awrejcewicz, A. Krysko, T. Yakovleva, D. Zelenchuk and V. Krysko, “Chaotic synchronization of vibrations of a coupled mechanical system consisting of a plate and beams”, In: Dynamical Systems, Analytical/Numerical Methods, Stability, Bifurcation and Chaos, Lodz, Poland, pp 129-140, 2011
J. Awrejcewicz, V.A. Krysko, I.V. Papkova, A.V. Krysko, Routes to chaos in continuous mechanical systems. Part 1: mathematical models and solution methods, Chaos, Solitons & Fractals 45 (2012) 687–708.
A.V. Krysko, J. Awrejcewicz, I.V. Papkova, V.A. Krysko, Routes to chaos in continuous mechanical systems: Part 2. Modelling transitions from regular to chaotic dynamics, Chaos, Solitons & Fractals 45 (2012) 709–720.
J. Awrejcewicz, A.V. Krysko, I.V. Papkova, V.A. Krysko, Routes to chaos in continuous mechanical systems. Part 3: the Lyapunov exponents, hyper, hyper-hyper and spatial-temporal chaos, Chaos, Solitons & Fractals 45 (2012) 721–736.
A.V. Krysko, J. Awrejcewicz, I.V. Papkova, V.M. Zakharov, T.V. Yakovleva and V.A. Krysko, “Non-linear dynamics of multi-layer shells, Unidentified chapter in unidentified book in the pdf file, January 2013, DOI: 10.13140/2.1.2092.7043
A.V. Krysko, J. Awrejcewicz, T.V. Yakovleva, V. Dobriyan, I.V. Papkova and V.A. Krysko, “Mathematical modeling of chaotic vibrations of strongly non-linear continuous structures”, Proceedings 6th Chaotic Modeling and Simulation International Conference, 11-14 June 2013, Istanbul, Turkey
Dobriyan, V.; Awrejcewicz, J.; Krysko, A.V.; Papkova, I.V.; Krysko, V.A. On the Lyapunov exponents computation of coupled non-linear Euler-Bernoulli beams. In Proceedings of the Fourteenth International Conference on Civil, Structural and Environmental Engineering Computing, Cagliari, Italy, 3–6 September 2013; Civil-Comp Press: Stirlingshire, UK, 2013; p. 53
J. Awrejcewicz, A.V. Krysko, I.E. Kutelev, N.A. Zagniboroda, M.V. Zhigalov and V.A. Krysko, “Analysis of chaotic vibrations of flexible plates using fast fourier transforms and wavelets”, International Journal of Structural Stability and Dynamics, Vol. 13, No. 7, 134005, October 2013
V.A. Krysko, J. Awrejcewicz, I.E. Kutelev, N.A. Zagniboroda, I.V. Papkova, A.V. Serebryakov, A.V. Krysko, Chaotic dynamics of flexible beams with piezoelectric and temperature phenomena, Phys. Lett. A, 377 (2013), pp. 2058–2061
Krysko, A.V.; Awrejcewicz, J.; Kutelev, I.E.; Zagniboroda, N.A.; Dobriyan, V.; Krysko, V.A. Chaotic dynamics of flexible Euler-Bernoulli beams. Chaos 2014, 34, 043130.
J. Awrejcewicz, A.V. Krysko, E.Yu. Krylova, I.V. Papkova and V.A. Krysko, “Chaotic parametric vibrations of flexible shells”, paper from unidentified conference in the pdf file, December 2013
J. Awrejcewicz, V.A. Krysko, I.V. Papkova, T.F. Yakovleva, N.A. Zagniboroda, M.V. Zhigalov, A.V. Krysko, V. Dobriyan, E. Yu. Krylova and S.A. Mitskievich, “Application of the Lyapunov exponents and wavelets to study and control of plates and shells”, Chapter 1 in an unidentified book in the pdf file, January 2014, <http://dx.doi.org/10.5772/57452>
J. Awrejcewicz, A.V. Krysko, V.A. Krysko, E. Yu. Krylova, S.A. Mitskievich, I.V. Papkova, T.V. Yakovleva, V.M. Zakharov and V. Dobriyan, “Turbulent phenomena in flexible plates and shells”, Unidentified chapter in unidentified book in the pdf file, January 2014, DOI: 10.1007/978-3-319-08266-0_5
J. Awrejcewicz, V.A. Krysko Jr., I.V. Papkova, E.Y. Krylov, A.V. Krysko, Spatio-temporal non-linear dynamics and chaos in plates and shells, Nonlinear Stud., 21 (2014), pp. 293–307
A.V. Krysko, J. Awrejcewicz, S.P. Pavlov, M.V. Zhigalov, V.A. Krysko, “On the iterative methods of linearization, decrease of order and dimension of the Karman-type PDEs”, Scient World J, 2014 (2014) [15 pages] DOI: 10.1155/2014/792829 · Source: PubMed
A.V. Krysko, J. Awrejcewicz, N.A. Zagniboroda, I.V. Papkova and V.A. Krysko, “Chaotic vibrations of flexible beams in a stationary temperature field”, 14th Pan-American Congress of Applied Mechanics (PACAM

XIV), March 24-28, 2014, Santiago, Chile

J. Awrejcewicz, A.V. Krysko, N.A. Zagniboroda, V.V. Dobriyan and V.A. Krysko, “On the general theory of chaotic dynamics of flexible curvilinear Euler-Bernoulli beams”, Nonlinear Dynamics, August 2014, DOI 10.1007/s11071-014-1641-5

V.F. Kirichenko, J. Awrejcewicz, A.F. Kirichenko, A.V. Krysko, V.A. Krysko, “On the non-classical mathematical models of coupled problems of thermo-elasticity for multi-layer shallow shells with initial imperfections”, Int J Non-Linear Mech, 74 (2015), pp. 51-72

J. Awrejcewicz, A.V. Krysko, I.V. Papkova, I.Y. Vygodchikova and V.A. Krysko, “On the methods of critical load estimation of spherical circle axially symmetrical shells”, Thin-Walled Structures, Vol. 94, pp 293-301, September 2015

Awrejcewicz, J.; Krysko, V.A.; Papkova, I.V.; Krysko, A.V. Deterministic Chaos in One-Dimensional Continuous Systems; World Scientific: Singapore, 2016.

J. Awrejcewicz, A.V. Krysko, M.V. Zhigalov and V.A. Krysko, “Chaotic dynamic buckling of rectangular spherical shells under harmonic lateral load”, Computers & Structures, Vol. 191, pp 80-99, October 2017

Jan Awrejcewicz, Anton V. Krysko, Nikolay P. Erofeev, Vitalyj Dobriyan, Marina A. Barulina and Vadim A. Krysko, “Quantifying chaos by various computational methods. Part 1: Simple systems”, Entropy, MDPI, 6 March 2018

V.A. Krysko, J. Awrejcewicz, E. Yu Krylova, I.V. Papkova and A.V. Krysko, “Non-symmetric forms of non-linear vibrations of flexible cylindrical panels and plates under longitudinal load and additive white noise”, Journal of Sound and Vibration, Vol. 423, pp 212-229, June 2018