



Professor Francesco Pellicano

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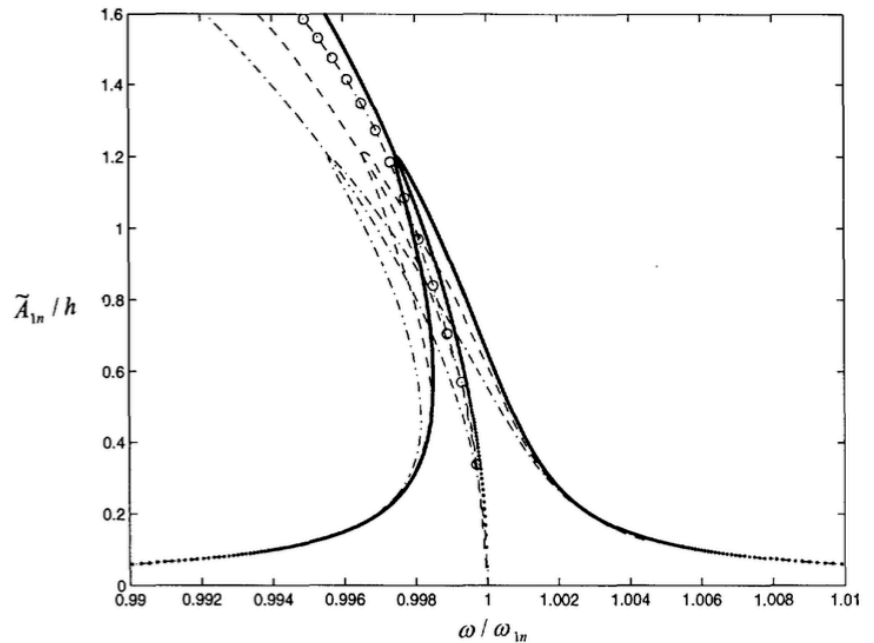
Department of Mechanical and Civil Engineering, 1996 – present
University of Modena and Reggio Emilia

Biography:

Francesco Pellicano was born in Rome, Italy on 1966. He received a M.S. degree in Aeronautical Engineering in 1992 and Ph.D. in Theoretical and Applied Mechanics in 1996, University of Rome “La Sapienza”, Dept. of Mechanics and Aeronautics. He was Researcher at the University of Modena and Reggio Emilia, Faculty of Eng., Dept. of Mech. and Civil Eng., 1996-2003. He is currently Professor at the same University 2005 – present

He did research on: nonlinear vibrations of structures; nonlinear normal modes; axially moving systems; nonlinear vibration of shells with fluid structure interaction; gears modeling; non-smooth dynamics; Chaos; Nonlinear Time Series Analysis; Forecasting Methods in Oceanography. He cooperated with Vestroni, Sestieri and Mastroddi of the University of Rome “La Sapienza” and with with: Paidoussis (Mc Gill Univ. Canada); Vakakis (University of Illinois at Urbana Champaign); Amabili (University of Parma, Italy).

He is the co-founder of Pulsar Dynamics and has served there from June 2014 – present.



From: Marco Amabili and Francesco Pellicano, “Low-dimensional model for nonlinear vibration of circular cylindrical shells”, (publisher and date not given in the pdf file. Most recent reference is dated 1998.)

Pulsar Dynamics is a high tech engineering company engaged in analysis and testing for all vibration and NVH problems and design, optimization and analysis of geared mechanical vibration: FEA Software, HPC and Cloud computing.

Selected Publications:

M. Amabili, F. Pellicano and M. P. Païdoussis, “Nonlinear vibrations of simply supported, circular cylindrical shells, coupled to quiescent fluid”, *Journal of Fluids and Structures* 12, 883-918, 1998

M. Amabili, F. Pellicano and M.P. Païdoussis, “Non-linear dynamics and stability of circular cylindrical shells containing flowing fluid. Part I: Stability”, *Journal of Sound and Vibration*, Vol. 225, No. 43, 26 August 1999, pp 655-699

M. Amabili, F. Pellicano and M.P. Païdoussis, “Non-linear dynamics and stability of circular cylindrical shells containing flowing fluid. Part II: Large-amplitude vibrations without flow”, *Journal of Sound and Vibration* Vol. 228, No. 5, pp 1103-1124, 1999

M. Amabili, F. Pellicano and M.P. Païdoussis, “Non-linear dynamics and stability of circular cylindrical shells containing flowing fluid. Part III: Truncation effect without flow and experiments”, *Journal of Sound and Vibration*, Vol. 237, No. 4, pp 617-640, 2000

M. Amabili, F. Pellicano and M.P. Païdoussis, “Non-linear dynamics and stability of circular cylindrical shells containing flowing fluid. Part IV: Large-amplitude vibrations with Flow”, *Journal of Sound and Vibration*, Vol. 237, No. 4, pp 641-666, November 2000

F. Pellicano, M. Amabili and A. F. Vakakis, 2000, “Nonlinear vibrations and multiple resonances of fluid-filled, circular shells, Part 2: perturbation analysis”, *ASME Journal of Vibration and Acoustics* 122, 355-364.

M. Amabili, F. Pellicano and M.A. Païdoussis, “Nonlinear stability of circular cylindrical shells in annular and unbounded axial flow”, *Journal of Applied Mechanics*, Vol. 68, No. 6, pp 827-834, May 2001

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Pellicano F, Mikhlin Y, Zolotarev I., “Nonlinear dynamics of shells with fluid-structure interaction”, Prague: Institute of Thermomechanics AS CR; 2002.

F. Pellicano and M. Amabili, “Stability and vibration of empty and fluid-filled circular cylindrical shells under static and periodic axial loads”, *International Journal of Solids and Structures* 40 (2003) 3229–3251

Pellicano, F., Amabili, M., 2003, “Stability and vibration of empty and fluid-filled circular cylindrical shells subjected to dynamic axial loads”, *International Journal of Solids and Structures* 40, 3229–3251.

Catellani, G., Pellicano, F., Dall’Asta, D., Amabili, M., 2004, “Parametric instability of a circular cylindrical shell with geometric imperfections”, *Computers & Structures* 82, 2635–2645.

Pellicano, F., 2005, “Experimental analysis of seismically excited circular cylindrical shells”, In: *Proceedings of ENOC-2005, Fifth EUROMECH Nonlinear Dynamics Conference, Eindhoven, The Netherlands, August 7– 12*

F. Pellicano, M. Amabili, “Dynamic instability and chaos of empty and fluid-filled circular cylindrical shells under periodic axial loads”, *J. of Sound and Vibr.* 293 (1-2) (2006) 227–252.

Avramov, K.V., Pellicano, F. 2006. “Dynamical instability of cylindrical shell with big mass at the end”, *Reports of the National Academy of Science of Ukraine, (in Russian), Vol. 5, pp. 41–46*

Pellicano, F., Avramov, K.V., 2007, “Linear and nonlinear dynamics of a circular cylindrical shell connected to a rigid disk”, *Communications in Nonlinear Science and Numerical Simulation* 12 (4), 496–518

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