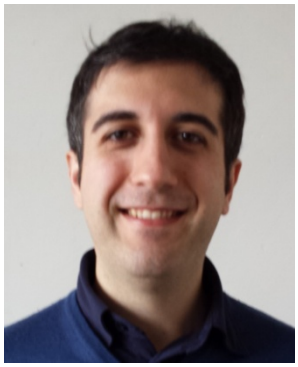

Professor Stefano Valvano

See:

https://scholar.google.it/citations?user=x72s0SYAAAAJ&hl=it&oi=ao

https://www.researchgate.net/profile/Stefano_Valvano

Education:

2017 PhD in Mechanical Engineering at Politecnico di Torino, Italy.

Thesis Title: Development of computational efficient shell formulation for analysis of multilayered structures subjected to mechanical, thermal, and electrical loadings.

Advisors: Prof. Erasmo Carrera, Prof. Maria Cinefra

DOI: http://dx.doi.org/10.6092/polito/porto/2675350

Research Interests:

Composite materials, Sandwich structures, Numerical methods, Advanced modeling for plate and shell structures, Smart materials systems and structures, Thermoelastic modelling, Multifield analysis, Viscoelastic materials, Optimization analysis and algorithms, Modelling and control of vibroacoustic systems, Active noise control.

Short Biography:

Postdoctoral Fellow at Politecnico di Torino 2017 and 2018.

Quality Award 2016, November 2017 1st place for Mechanical Engineering Doctorate, Politecnico di Torino, Italy.

Assistant Professor , from May 2018 at Faculty of Engineering and Architecture, Kore University of Enna, Italy.

Teaching Bachelor Course in Aerospace Engineering at Faculty of Engineering and Architecture, Kore University of Enna, Italy, A.A. 2018/2019: Fundamentals of Aeronautics (Ownership of the course), Numerical models for aerospace problems (Ownership of the course).

Teaching Bachelor Course in Aerospace Engineering at Faculty of Engineering and Architecture, Kore University of Enna, Italy, A.A. 2019/2020: Aerodynamics (Ownership of the course), Numerical models for aerospace problems (Ownership of the course).

Referee Service in: Shock and Vibration, Journal of Intelligent Material Systems and Structures, Mechanics of Advanced Materials and Structures, Composite Structures, TWMS Journal of Pure and Applied Mathematics, Journal of King Saud University – Science, Composites Part B: Engineering, Journal of the Brazilian Society of Mechanical Sciences and Engineering, Coatings, Iranian Journal of Science and Technology, Transactions of Civil Engineering, Applied Mathematical Modelling, Computation, Materials, Acta Mechanica, Metals, International Journal of Computer Aided Engineering and Technology, Micromachines, Energies, Aerospace Science and Technology, Mechanics Based Design of Structures and Machines, An International Journal, Symmetry, Sensors, Science and Engineering of Composite Materials, Thin-Walled Structures, Mathematical Problems in Engineering, Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, Advanced Modeling and Simulation in Engineering Sciences, Journal of Vibration Engineering & Technologies, Mechanical Systems and Signal Processing.

Editor Service in: Journal of Aircraft and Spacecraft Technology, Journal of Mechatronics and Robotics, Facta Universitatis, Series: Mechanical Engineering, Curved and Layered Structures, Reports in Mechanical Engineering.

Selected Publications:

Alaimo A, Orlando C, Valvano S (2019), ”An alternative approach for modal analysis of stiffened thin-walled structures with advanced plate elements”, European Journal of Mechanics/A Solids 77: 103820
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Alaimo A, Orlando C, Valvano S (2019), ”Analytical frequency response solution for composite plates embedding viscoleastic layers”, Aerospace Science and Technology 92: 429-445
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Valvano S, Alaimo A, Orlando C (2019), ”Sound transmission analysis of viscoelastic composite multilayered shells structures”, Aerospace 6(6): 69
DOI: http://dx.doi.org/10.3390/aerospace6060069

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Filippi M, Carrera E, Valvano S (2018), ”Analysis of multilayered structures embedding viscoelastic layers by higher-order, and zig-zag plate elements”, Composites Part B: Engineering 154: 77-89
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Carrera E, Valvano S, Kulikov GM (2018), "Electro-mechanical analysis of composite and sandwich multilayered structures by shell elements with node-dependent kinematics", International Journal of Smart and Nano Materials 9(1): 1-33.
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Keshava Kumar S, Harursampath D, Carrera E, Cinefra M, Valvano S (2018), ”Modal analysis of delaminated plates and shell using Carrera Unified Formulation-MITC9 shell element”, Mechanics of Advanced Materials and Structures 25(8): 681-697
DOI: http://dx.doi.org/10.1080/15376494.2017.1302024

Pagani A, Valvano S, Carrera E (2018), ”Analysis of laminated composites and sandwich structures by variable-kinematic MITC9 plate elements”, Journal of Sandwich Structures and Materials 20(1): 4-41
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Carrera E, Valvano S, Kulikov GM (2017), ”Multilayered plate elements with node-dependent kinematics for electro-mechanical problems”, International Journal of Smart and Nano Materials 9(4): 279-317
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