

Χάρης Ι. Γαντές

Καθηγητής Ε.Μ.Π.

Εργαστήριο Μεταλλικών Κατασκευών - Τομέας Δομοστατικής - Σχολή Πολιτικών Μηχανικών
Εθνικό Μετσόβιο ΠολυτεχνείοΠολυτεχνειούπολη Ζωγράφου, Ηρώων Πολυτεχνείου 9, 157 80 Ζωγράφου
τηλ. 210 7723440, fax 210 7723442e-mail: chgantes@central.ntua.gr, chgantes@alum.mit.eduWeb: <http://users.civil.ntua.gr/chgantes> - LinkedIn: www.linkedin.com/in/CharisGantes**ΠΕΡΙΛΗΨΗ ΔΡΑΣΤΗΡΙΟΤΗΤΩΝ ΣΕ ΘΕΜΑΤΑ ΜΗ ΓΡΑΜΜΙΚΗΣ ΔΥΝΑΜΙΚΗΣ ΕΥΣΤΑΘΕΙΑΣ ΚΑΤΑΣΚΕΥΩΝ****ΣΥΜΜΕΤΟΧΗ ΣΕ ΧΡΗΜΑΤΟΔΟΤΟΥΜΕΝΑ ΕΡΕΥΝΗΤΙΚΑ ΠΡΟΓΡΑΜΜΑΤΑ**

- “Studies of Dynamic Instabilities and Postcritical Behavior of Deformable Systems”, Πρόγραμμα INTAS συνεργασίας με ερευνητικές ομάδες από τη Ρωσία, με τον Καθηγητή Α.Ν. Κουνάδη ως επιστημονικό υπεύθυνο από Ελληνικής πλευράς (1999-2001).
- “Dynamics of Multi-Degree-of-Freedom and Continuous Mechanical Systems with Application to Aerohydroelastic Systems and Smart Engineering Structures”, Πρόγραμμα INTAS συνεργασίας με ερευνητικές ομάδες από τη Ρωσία, με τον Καθηγητή Α.Ν. Κουνάδη ως επιστημονικό υπεύθυνο από Ελληνικής πλευράς (1996-1998).

ΕΠΙΒΛΕΨΗ ΔΙΔΑΚΤΟΡΙΚΩΝ ΔΙΑΤΡΙΒΩΝ

- Ισαβέλλα Βασιλοπούλου (Νοέμ. 2011), “Μη Γραμμική Δυναμική Συμπεριφορά και Σχεδιασμός Δικτύων Καλωδίων”.

<http://dx.doi.org/10.12681/eadd/26130>

ΚΕΦΑΛΑΙΑ ΣΕ ΒΙΒΛΙΑ

- Vassilopoulou, I. and Gantes, C.J., “Nonlinear Dynamic Response of MDOF Cable Nets Estimated by Equivalent SDOF Models”, *Computational Methods in Earthquake Engineering, Computational Methods in Applied Sciences*, Vol. 30, edited by M. Papadrakakis, M. Fragiadakis and V. Plevris, Springer Verlag, pp. 345-379, 2013.

doi: http://dx.doi.org/10.1007/978-94-007-6573-3_17

ΔΗΜΟΣΙΕΥΣΕΙΣ ΣΕ ΕΠΙΣΤΗΜΟΝΙΚΑ ΠΕΡΙΟΔΙΚΑ

- Vassilopoulou, I., Petrini, F. and Gantes, C.J., “Nonlinear Dynamic Behavior of Cable Nets Subjected to Wind Loading”, *Structures*, Vol. 10, pp. 170-183, May 2017.
doi: <http://dx.doi.org/10.1016/j.istruc.2017.03.004>
- Vassilopoulou, I. and Gantes, C.J., “Influence of a Deformable Contour Ring on the Nonlinear Dynamic Response of Cable Nets”, *Structures*, Vol. 6, pp. 146-158, May 2016.
doi: <http://dx.doi.org/10.1016/j.istruc.2016.02.007>
- Vassilopoulou, I. and Gantes, C.J., “Nonlinear Dynamic Phenomena in a SDOF Model of Cable Net”, *Archive of Applied Mechanics*, Vol. 82, Issue 10-11, pp. 1689-1703, October 2012.
doi: <http://dx.doi.org/10.1007/s00419-012-0660-2>
- Vassilopoulou, I. and Gantes, C.J., “Nonlinear Dynamic Behavior of Saddle Form Cable Nets under Uniform Harmonic Load”, *Engineering Structures*, Vol. 33, Issue 10, pp. 2762-2771, October 2011.

doi: <http://dx.doi.org/10.1016/j.engstruct.2011.06.001>

- Vassilopoulou, I. and Gantes, C.J., “Vibration Modes and Natural Frequencies of Saddle Form Cable Nets”, *Computers & Structures*, Vol. 88, Issues 1-2, pp. 105-119, January 2010.
doi: <http://dx.doi.org/10.1016/j.compstruc.2009.07.002>
- Kounadis, A.N., Gantes, C.J. and Raftoyiannis, I.G., “A Geometric Approach for Establishing Dynamic Buckling Loads of Autonomous Potential N-Degree-of-Freedom Systems”, *International Journal of Non-linear Mechanics*, Vol. 39, Issue 10, pp. 1635-1646, December 2004.
doi: <http://dx.doi.org/10.1016/j.ijnonlinmec.2004.01.005>
- Kounadis, A.N., Gantes, C.J. and Bolotin, V.V., “An Improved Energy Criterion for Dynamic Buckling of Imperfection Sensitive Nonconservative Systems”, *International Journal of Solids and Structures*, Vol. 38, Issues 42-43, pp. 7487-7500, October 2001.
doi: [http://dx.doi.org/10.1016/S0020-7683\(01\)00042-7](http://dx.doi.org/10.1016/S0020-7683(01)00042-7)
- Bolotin, V.V., Grishko, A.A., Roberts, J.B., Kounadis, A.N. and Gantes, C.J., “The Fluttering Panel as a Continuous Nonlinear Nonconservative System”, *Journal of Vibration and Control*, Vol. 7, No. 2, pp. 233-247, February 2001.
doi: <http://dx.doi.org/10.1177/107754630100700206>
- Gantes, C.J., Kounadis, A.N., Raftoyiannis, J. and Bolotin, V.V., “A Dynamic Buckling Geometric Approach of 2-DOF Autonomous Potential Lumped-Mass Systems under Impact Loading”, *International Journal of Solids and Structures*, Vol. 38, Issues 22-23, pp. 4071-4089, May-June 2001.
doi: [http://dx.doi.org/10.1016/S0020-7683\(00\)00254-7](http://dx.doi.org/10.1016/S0020-7683(00)00254-7)
- Kounadis, A.N., Gantes, C.J. and Bolotin, V.V., “Dynamic Buckling Loads of Autonomous Potential Systems Based on the Geometry of the Energy Surface”, *International Journal of Engineering Science*, Vol. 37, Issue 12, pp. 1611-1628, September 1999.
doi: [http://dx.doi.org/10.1016/S0020-7225\(98\)00136-0](http://dx.doi.org/10.1016/S0020-7225(98)00136-0)
- Bolotin, V.V., Grishko, A.A., Kounadis, A.N., Gantes, C.J. and Roberts, J.B., “Influence of Initial Conditions on the Postcritical Behavior of a Nonlinear Aeroelastic System”, *Nonlinear Dynamics*, Vol. 15, Issue 1, pp. 63-81, January 1998.
doi: <http://dx.doi.org/10.1023/A:1008204409853>
- Gantes, C.J., Kounadis, A.N. and Mallis, J., “Approximate Dynamic Buckling Loads of Discrete Systems via Geometric Considerations of their Energy Surface”, *Computational Mechanics*, Vol. 21, Issue 4-5, pp. 398-402, May 1998.
doi: <http://dx.doi.org/10.1007/s004660050317>
- Bolotin, V.V., Grishko, A.A., Kounadis, A.N. and Gantes, C.J., “Nonlinear Panel Flutter in Remote Post-Critical Domains”, *International Journal of Non-linear Mechanics*, Vol. 33, Issue 5, pp. 753-764, September 1998.
doi: [http://dx.doi.org/10.1016/S0020-7462\(97\)00048-6](http://dx.doi.org/10.1016/S0020-7462(97)00048-6)
- Kounadis, A.N., Gantes, C.J. and Simitzes, G., “Nonlinear Dynamic Buckling of Multi-DOF Structural Dissipative Systems under Impact Loading”, *International Journal of Impact Engineering*, Vol. 19, Issue 1, pp. 63-80, January 1997.
doi: [http://dx.doi.org/10.1016/S0734-743X\(96\)00006-1](http://dx.doi.org/10.1016/S0734-743X(96)00006-1)
- Gantes, C.J. and Kounadis, A.N., “Energy-Based Dynamic Buckling Estimates for Autonomous Dissipative Systems”, *AIAA Journal*, Vol. 33, No. 7, pp. 1342-1349, July 1995.
doi: <http://dx.doi.org/10.2514/3.12797>

ΠΑΡΟΥΣΙΑΣΕΙΣ ΣΕ ΕΠΙΣΤΗΜΟΝΙΚΑ ΣΥΝΕΔΡΙΑ

- Kougiumtzoglou, I.A., Vassilopoulou, I. and Gantes, C.J., “Stochastic Response Determination and Reliability Assessment of a Nonlinear Cable Net Structural System”, *COMPADYN 2013: 4th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, Kos, Greece, June 12-14, 2013, pp. 1230-1248.
- Βασιλοπούλου, Ι., Γαντές, Χ.Ι. και Γκιμούσης, Η., “Απόκριση Δικτύων Καλωδίων υπό Φορτία Ανέμου”, *7^ο Εθνικό Συνέδριο Μεταλλικών Κατασκευών*, Βόλος, 29-30 Σεπ. και 1 Οκτ. 2011.
- Vassilopoulou, I. and Gantes, C.J., “Nonlinear Dynamic Behaviour of Saddle Shaped Cable Nets under Wind Action”, *35th International Symposium on Bridge and Structural Engineering*, jointly organised by IABSE-IASS, London, England, September 20-23, 2011.
- Douthe, C. and Gantes, C.J., “Investigation of Coupling between External and Parametric Resonances in Small Sagged Inclined Cables”, *CompDyn 2011: III ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, Corfu, Greece, May 25-28, 2011.
- Vassilopoulou, I. and Gantes, C.J., “Nonlinear Dynamic Behaviour of a Saddle Form Cable Net Modeled by an Equivalent SDOF Cable Net”, *CompDyn 2011: 3rd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, Corfu, Greece, May 26-28, 2011.
- Βασιλοπούλου, Ι. και Γαντές, Χ.Ι., “Κριτήρια Ευπάθειας Δικτύων Καλωδίων Έναντι Φαινομένων Κόπωσης”, *6^ο Εθνικό Συνέδριο Μεταλλικών Κατασκευών*, Ιωάννινα, 2-4 Οκτ. 2008, Τόμος ΙΙ, σελ. 134-141.
- Vassilopoulou, I. and Gantes, C.J., “Modal Transition and Dynamic Nonlinear Response of Cable Nets under Fundamental Resonance”, *8th HSTAM International Congress on Mechanics*, Patras, Greece, July 12-14, 2007, pp. 787-794.
- Vassilopoulou, I. and Gantes, C.J., “Vibration Modes and Dynamic Response of Saddle Form Cable Nets under Sinusoidal Excitation”, *EUROMECH Colloquium 483: Geometrically Non-linear Vibrations of Structures*, Porto, Portugal, 9-11 July 2007.
- Vassilopoulou, I. and Gantes, C.J., “Similarity Relations for Nonlinear Dynamic Oscillations of Cable Nets”, *CompDyn 2007: Computational Methods in Structural Dynamics and Earthquake Engineering*, Rethymnon, Crete, Greece, June 13-15, 2007.
- Kounadis, A.N. and Gantes, C.J., “Approximate Dynamic Buckling Loads of Nonconservative Structural Systems via Energy Considerations”, *ICTAM 2000 - 20th IUTAM Congress*, Chicago, USA, Aug. 27-Sept. 2, 2000.
- Kounadis, A.N., Gantes, C. and Bolotin, V.V., “Dynamic Buckling Loads of Nonconservative Systems Based on the Geometry of their Energy Surface”, *5th Greek National Conference on Mechanics*, Ioannina, Aug. 27-30, 1998, edited by P.S. Theocaris, D.I. Fotiadis, and C.V. Massalas, Vol. 2, pp. 1056-1065.
- Gantes, C.J. and Kounadis, A.N., “Qualitative Criteria for Establishing Dynamic Buckling Loads of Autonomous Dissipative Systems”, *19th IUTAM International Congress of Theoretical and Applied Mechanics*, Kyoto, Japan, August 25-31, 1996.
- Gantes, C., Kounadis, A.N. and Mallis, J., “Dynamic Stability of Discrete Systems via Geometric and Energy Considerations Using Mathematica”, *2nd Greek National Congress on Computational Mechanics*, Chania, Crete, June 26-28, 1996, pp. 384-391.
- Kounadis, A.N., Gantes, C. and Simitzes, G.J., “Nonlinear Instability of Structures Subjected to Impact Loading”, *2nd European Conference on Structural Dynamics: Eurodyn '93*, Trondheim, Norway, June 21-23, 1993, T. Moan et al. Editors, A.A. Balkema, Rotterdam, Vol. 2, pp. 641-649.
- Kounadis, A.N., Gantes, C. and Kandakis, G., “Numerical Solutions and Theoretical Predictions Based on Energy Criteria for Establishing the Dynamic Response of Autonomous Dissipative & Non-

Dissipative Systems”, *1st Greek National Congress on Computational Mechanics*, Athens, Greece, September 3-4, 1992, pp. 601-609.