CURRICULUM VITAE

Prof. Alba Sofi

PERSONAL INFORMATION

Department of Architecture and Territory (dArTe)
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CURRENT POSITION

2020 Associate Professor of *Structural Mechanics* at University "Mediterranea" of Reggio Calabria, Italy, Department of Architecture and Territory (dArTe).

EDUCATION AND ACADEMIC CAREER

2017 National Scientific Qualification (art.16 of the law 30 December 2010, n.240) as Full Professor of *Structural Mechanics.*

2014 (2012 Session) National Scientific Qualification (art.16 of the law 30 December 2010, n.240) as Associate Professor of *Structural Mechanics.*

2005 Assistant Professor (tenured position) of *Structural Mechanics* at University "Mediterranea" of Reggio Calabria, Italy, Department of Architecture and Territory (dArTe).

2004-2005 Fellowship as Research Assistant, University "Mediterranea" of Reggio Calabria, Italy, Faculty of Architecture.

2002-2004 Post-Doctoral fellowship, University of Messina, Italy, Faculty of Engineering.

2002-2003 Contract as Assistant Professor of *Structural Mechanics* at University "Mediterranea" of Reggio Calabria, Italy, Faculty of Architecture.

2001-2002 Contract as Assistant Professor of *Structural Mechanics* at University "Mediterranea" of Reggio Calabria, Italy, Faculty of Architecture.

1999-2002 Ph.D. in Structural Engineering at the Department of Structural and Geotechnical Engineering at University of Palermo, Italy, Faculty of Engineering. Thesis title:

"Static and Dynamic Analysis of Structures with Geometrical Nonlinearities and Uncertain Parameters", (Supervisor: Prof. Guido Borino), in English.

1998 Master of Science Degree in Civil Engineering, "cum laude", University of Messina, Italy, Faculty of Engineering. Thesis title: "Analisi dinamica non lineare di cavi sospesi", (Supervisor: Prof. Giuseppe Muscolino), in Italian.

RESEARCH AND TEACHING ACTIVTIES AT FOREIGN UNIVERSITIES

July 2019 Visiting Professor of the Course "Introduction to the Finite Element Method", at "International Weeks 2019", Xidian University, Xi'an (China), July 1-15, 2019.

May 2018 Visiting Professor at Guangzhou University-Tamkang University Joint Research Center for Engineering Structure Disaster Prevention and Control, Guangzhou University, Guangzhou (China), May 17-June 3, 2018.

2016-2019 Appointment as Visiting Fellow in the Department of Engineering Science, University of Oxford, Oxford (UK).

Aug-Nov 2017 Appointment as Visiting Fellow in the School of Civil and Environmental Engineering, Faculty of Engineering, University of New South Wales, Sydney (Australia).

Sept - Dec 2004 Research activity at "Rice University", Houston (Texas, USA) as Visiting Scholar under the supervision of Professor Pol Spanos.

MAIN SERVICES IN ACADEMIC EDUCATION

Apr 2017 to present Erasmus delegate of the Department of Architecture and Territory.

2019 to present Member of the Doctoral School in "Architecture", University "Mediterranea" of Reggio Calabria.

2017-2019 Member of the Doctoral School in "Architecture and Territory", University "Mediterranea" of Reggio Calabria.

2013-2017 Member of the Doctoral School in "Civil, Environmental and Safety Engineering", University "Mediterranea" of Reggio Calabria.

2012-2015 Member of the Doctoral School in "Civil Engineering, Energy, Environment and Materials", University "Mediterranea" of Reggio Calabria.

2008-2014 Member of the Doctoral School in "Maritime, Materials and Structural Engineering", University "Mediterranea" of Reggio Calabria.

2007-2012 Member of the Doctoral School in "Materials and Structural Engineering", University "Mediterranea" of Reggio Calabria.

2007-2012 Member of the Scientific Committee of the Library of the Faculty of Architecture, University "Mediterranea" of Reggio Calabria, Italy.

TEACHING ACTIVITIES

A.Y. 2020-2021 *Statics* (60 h, curriculum in Architecture, One Cycle Degree Course, University "Mediterranea" of Reggio Calabria, Italy).

A.Y. 2016-2017
to A.Y. 2019-2020 *Structural Mechanics* (120 h, curriculum in Architecture, One Cycle Degree Course, University "Mediterranea" of Reggio Calabria, Italy).

A.Y. 2012-2013
to A.Y. 2014-2015 *Computational Structural Mechanics* (48-60 h, curriculum in Engineering, University "Mediterranea" of Reggio Calabria, Italy).

A.Y. 2011-2012 *Statics* (80 h, curriculum in Architecture, University "Mediterranea" of Reggio Calabria, Italy, Course B).

A.Y 2006-2007
to A.Y. 2009-2010 *Statics* (80-120 h, curriculum in Architecture, University "Mediterranea" of Reggio Calabria, Italy, Courses B and C).

A.Y. 2005-2006 *Numerical Modeling* (30 h, Faculty of Architecture, University "Mediterranea" of Reggio Calabria, Italy).

Jan 2004 *Stochastic Seismic Dynamics* (4 h, Master in *Earthquake Engineering*, University of Messina, Italy).

A.Y. 2002-2003 *Physical Reality and Structural Models* (25 h, Faculty of Architecture, University "Mediterranea" of Reggio Calabria, Italy).

A.Y. 2001-2002 *Physical Reality and Structural Models in Structural Mechanics* (25 h, Faculty of Architecture, University "Mediterranea" of Reggio Calabria, Italy).

A.Y. 2003-2004
to A.Y. 2010-2011 Supporting activity to the courses of *Statics* and *Structural Mechanics* (curriculum in Architecture, University "Mediterranea" of Reggio Calabria, Italy).

A.Y. 2011-2012
to A.Y. 2012-2013 Supporting activity to the course of *Structural Mechanics* (curriculum in Engineering, University "Mediterranea" of Reggio Calabria, Italy).

EDITORIAL ACTIVITIES

Mar 2019 to present Member of the Editorial Board of the *Journal of Infrastructure Preservation and Resilence*, Springer Nature.

Oct 2018 to present Associate Editor of the *International Journal of Fuzzy Computation and Modelling*.

Oct 2018 to present Review Editor of *Computational Methods in Structural Engineering*.

Oct 2017 to present Associate Managing Editor of the *ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering.*

Oct 2017 to present Member of the Editorial Board of *Advances in Engineering Software*, Elsevier.

Jan 2017 to present Associate Editor of the *ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering; Part B: Mechanical Engineering.*

Aug 2016 to present Member of the Editorial Board of *Mathematical Problems in Engineering*, Hindawi Publishing Corporation.

Dec 2014 to Jan 2017 Guest Editor of *ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering.*

April 2015 to present Member of the Editorial Board of *Shock and Vibration*, Hindawi Publishing Corporation.

Nov 2015 to present Member of the Editorial Board of the *ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering; Part B: Mechanical Engineering.*

- Lead Guest Editor of a Special Section on "Non-probabilistic Approaches for Handling Uncertainties in Engineering" of *ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B. Mechanical Engineering* co-edited by Professors Isaac Elishakoff and Giuseppe Muscolino (2015).
- Lead Guest Editor of a Special Issue on "Non-probabilistic Treatments of Uncertainties: Recent Developments" of *ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B. Mechanical Engineering* co-edited by Professors Isaac Elishakoff and Giuseppe Muscolino (2015).
- Referee for the following international journals:

1. *Acta Mechanica*;
2. *Advances in Engineering Software*;
3. *AIAA Journal*;
4. *Applied Mathematical Modeling*;
5. *ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering*;
6. *ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering*;
7. *Communications in Nonlinear Science and Numerical Simulation*;

8. *Composite Structures*;
9. *Computer Methods in Applied Mechanics and Engineering*;
10. *Computers and Structures*;
11. *Engineering Structures*;
12. *Journal of Infrastructure Preservation and Resilience*;
13. *International Journal for Multiscale Computational Engineering*;
14. *International Journal for Numerical Methods in Engineering*;
15. *International Journal of Non-Linear Mechanics*;
16. *International Journal of Solids and Structures*;
17. *Journal of Applied Mechanics ASME*;
18. *Journal of Sound and Vibration*;
19. *Journal of Vibration and Control*;
20. *Meccanica*;
21. *Mechanical Systems and Signal Processing*;
22. *Nonlinear Dynamics*;
23. *Probabilistic Engineering Mechanics*;
24. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*;
25. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*;
26. *Structural Safety*;
27. *Thin-Walled Structures*;
28. *Wind and Structures, An International Journal*.

- Referee for the following international conferences:

  -ASME 2020 International Mechanical Engineering Congress & Exposition (IMECE 2020), November 16-19, 2020, Virtual Conference, Online.

  -X International Conference on Structural dynamics (Eurodyn 2017), September 10-13, 2017.

  -ASME 2017 International Mechanical Engineering Congress & Exposition (IMECE 2017), November 3-9, 2017, Tampa, (Florida, USA).

- Reviewer of book proposals for CRC Press, Taylor & Francis Group.

- Outstanding "Reviewer" for the following Elsevier journals:

  1. *Applied Mathematical Modeling* (November 2016;
  2. *Composite Structures* (July 2017);
  3. *Computer Methods in Applied Mechanics and Engineering* (April 2017);
  4. *Computers and Structures* (September 2017);
  5. *Engineering Structures* (November 2018);
  6. *Mechanical Systems and Signal Processing* (December 2016);

7. *Thin-Walled Structures* (August 2017).

INVITED SEMINARS

- "The interval model of uncertainty: fundamentals and recent advances", Guangzhou University, Guangzhou (China), May 22, 2018.
- "Static analysis of structural systems with interval uncertainties", Guangzhou University, Guangzhou (China), May 28, 2018.
- "Dynamic analysis of structural systems with interval uncertainties", Guangzhou University, Guangzhou (China), May 30, 2018.
- "Finite Element Procedures for the Analysis of Structures with Interval Uncertainties", Department of Engineering Science in the University of Oxford (UK), November 6, 2017.
- "Finite Element Analysis of Structures with Interval Uncertainties", University of New South Wales, Sydney (Australia), September 5, 2017.
- "Analysis of Structures with Uncertain Parameters Modelled as Interval Variables", Department of Engineering Science in the University of Oxford (UK), February 23, 2015.
- "Non-Stationary Response of Nonlinear Oscillators Subject to Random Excitations", Department of Civil Engineering, Rice University, Houston (Texas, USA), November 30, 2004.

SCIENTIFIC ASSOCIATIONS

- Member of the "Italian Association of Theoretical and Applied Mechanics" (AIMETA)
- Member of the "Dynamic and Stability AIMETA" group (GADES)
- Member of the "Stochastic Mechanics AIMETA" group (GMS)
- Member of the Scientific Council of the "Interdepartmental Centre of Structural, Theoretical and Experimental Dynamics" (C.I.Di.S)
- Member of the "American Society of Mechanical Engineers" (ASME)
- Member of the "American Society of Civil Engineers" (ASCE)
- Member of the "European Mechanics Society" EUROMECH
- Member of the "Structural Engineering Institute" (SEI) of ASCE
- Member of the "Bernoulli Society" (BS).

ORGANIZATION OF CONFERENCES AND MINI-SYMPOSIA

- Co-Chair del "9th International Workshop on Reliable Engineering Computing, Risk and Uncertainty in Engineering Computations" (REC2021), Taormina (Italy), May 16-20, 2021.
- Topic organizer of the Symposium "Stochastic Optimization, Uncertainty and Probability"; Topic co-organizers: Professors Isaac Elishakoff (Florida Atlantic University, USA) and Giuseppe Muscolino

(University of Messina, Italy), ASME 2019 International Mechanical Engineering Congress & Exposition (IMECE 2019), November 8-14, 2019, Salt Lake City (Utah, USA).

- Session on "Uncertainty Quantification and Analysis in Engineering: Precise and Imprecise Probability Approaches", in collaboration with Dr. Alice Cicirello (University of Oxford, UK) and Professors Isaac Elishakoff (Florida Atlantic University, USA) and Giuseppe Muscolino (University of Messina, Italy), The Tenth International Conference on Engineering Computational Technology (ECT 2018), Sitges (Barcelona, Spain), September 4- 6, 2018.
- Topic organizer of the Symposium "General Topic on Risk, Safety and Reliability"; Topic co-organizers: Prof. Xiaobin Le (Wentworth Institute of Technology, USA) e Arun Veeramany (Pacific Northwest National Laboratory, USA), ASME 2018 IMECE-International Mechanical Engineering Congress & Exposition (IMECE 2018), Pittsburgh (PA, USA) November 9-15, 2018.
- Topic organizer of the Symposium "General Topic on Risk, Safety and reliability"; Topic co-organizer: Chimba Mkandawire (Exponent, USA), ASME 2017 International Mechanical Engineering Congress & Exposition (IMECE 2017), November 3-9, 2017, Tampa, (Florida, USA).
- Topic organizer of the Symposium "Stochastic Optimization, Uncertainty and Probability"; Topic co-organizers: Professors Isaac Elishakoff (Florida Atlantic University, USA) and Giuseppe Muscolino (University of Messina, Italy), ASME 2017 International Mechanical Engineering Congress & Exposition (IMECE 2017), November 3-9, 2017, Tampa, (Florida, USA).
- Mini-symposium "Non Probabilistic Approaches for Uncertainty Representation and Analysis in Engineering", organized in collaboration with Professors Davis Moens (KU Leuven, Belgium), Dirk Vandepitte (KU Leuven, Belgium), Michael Hanss (University of Suttgart, Germany), UNCECOMP 2017 2nd International Conference on Uncertainty Quantification in Computational Sciences and Engineering, 15-17 June, 2017 Rhodes Island, Greece.
- Topic organizer of the Symposium "Stochastic Optimization, Uncertainty and Probability"; Topic co-organizers: Professors Isaac Elishakoff (Florida Atlantic University, USA) and Giuseppe Muscolino (University of Messina, Italy), ASME 2016 International Mechanical Engineering Congress & Exposition (IMECE 2016), November 11-17, 2016, Phoenix, (Arizona, USA).
- Topic organizer of the Symposium "Stochastic Optimization, Uncertainty and Probability"; Topic co-organizers: Professors Isaac Elishakoff (Florida Atlantic University, USA) and Giuseppe Muscolino (University of Messina, Italy), ASME 2015 International Mechanical Engineering Congress & Exposition (IMECE 2015), November 13-19, 2015, Houston, (Texas, USA).
- Mini-symposium "Reliability of Structures under Environmental Loads: Stochastic Analysis and Design", organized in collaboration with Professors Mario Di Paola (University of Palermo, Italy) and Giuseppe Muscolino (University of Messina, Italy), UNCECOMP 2015 1st International Conference on Uncertainty Quantification in Computational Sciences and Engineering, 25 - 27 May, 2015 Crete Island, Greece.
- Mini-symposium "Non-Probabilistic Modelling and Analysis of Uncertainty", organized in collaboration with Professors Isaac Elishakoff (Florida Atlantic University, USA) and Giuseppe Muscolino (University of Messina, Italy), Second International Conference on Vulnerability and Risk Analysis and Management (ICVRAM2014), July 13-16, 2014, University of Liverpool, UK.
- Mini-symposium "Interval Analysis of Uncertainty", organized in collaboration with Professors Isaac Elishakoff (Florida Atlantic University, USA) and Giuseppe Muscolino (University of Messina, Italy),

11th International Conference on Structural Safety & Reliability, June 16-20, 2013 Columbia University, New York, NY.

- Member of the organization committee of the International Conference "Stochastic Mechanics 2012", June 7-10, 2012 Ustica (Palermo, Italy).

SCIENTIFIC COMMITEES

- Member of the Scientific Committee of UNCECOMP 2021 4th International Conference on Uncertainty Quantification in Computational Sciences and Engineering, Athens (Greece), June 21-23, 2021.
- Member of the Committee on Probability and Statistics in the Physical Sciences of the Bernoulli Society (http://www2.aueb.gr/bs-cpsps/), since September 2018.
- Member of the Scientific Committee of UNCECOMP 2019 3rd International Conference on Uncertainty Quantification in Computational Sciences and Engineering, 24-26 June, 2019 Crete Island, Greece.
- Member of the Scientific Committee of the 8th International Conference on Computational Stochastic Mechanics (CSM8), Paros, Greece, June 10-13, 2018.
- Member of the Editorial Board of the Tenth International Conference on Engineering Computational Technology (ECT2018), Sitges, Barcelona, Spain, 4-6 September 2018.
- Member of the Scientific Committee of the 8th International Workshop on Reliable Engineering Computing, Computing with Confidence (REC2018), University of Liverpool, Liverpool, UK, June 16-18, 2018.
- Member of the Scientific Committee of Stochastic Mechanics (SM2016), Capri, Italy, June 12-15, 2016.
- Member of the Scientific Committee of the 7th International Workshop on Reliable Engineering Computing, Computing with Polymorphic Uncertain Data (REC2016), Ruhr University, Bochum, Germany, June 15-17, 2016.
- Member of the Scientific Committee of the 7th International Conference on Computational Stochastic Mechanics (CSM7), Santorini, Greece, June 15-18, 2014.

RESEARCH PROJECTS

- PRIN 2017: Multiscale Innovative Materials and Structures. Principal Investigator: Prof. Fernando Fraternali. Duration: 36 months. Role: participant.
- PRIN 2015: Identification and diagnostics of complex structural systems. Principal Investigator: Prof. Paolo Casini. Duration: 36 months. Role: participant.
- PRIN 2010-2011: Dynamic, stability and control of flexible structures. Principal Investigator: Prof. Angelo Luongo. Duration: 36 months. Role: participant.
- PON01_01869: Technologies and Innovative Materials for territory protection and environmental safeguard (Safeguard theme) - Implementing entity: MECMAT, University "Mediterranea" of Reggio Calabria, 2011. Role: participant.
- PRIN 2004: Monitoring and control of monumental heritage: an approach based on low-cost distributed technologies. Principal Investigator: Prof. Alessandro De Stefano. Duration: 24 months. Role: participant.

- PRIN 2003: Models and Phenomena in the Dynamics of Complex Structural Systems: analysis, experimentation and control. Principal Investigator: Prof. Fabrizio Vestroni. Duration: 24 months. Role: participant.
- PRIN 2003: Non-destructive methods for the identification and diagnosis of materials and structures. Principal Investigator: Prof. Antonino Morassi. Duration: 24 months. Role: participant.
- Internal funding RdB (basic research) 2008, 2009 e 2010. Role: Principal Investigator.

SUPERVISION ACTIVITY

- Supervisor of the Ph.D student Antonino Gulletta, XXXV cycle, Doctoral School in "Architecture", University "Mediterranea" of Reggio Calabria, Italy.
- Co-supervisor of the Ph.D student Filippo Giunta, XXXII cycle, Doctoral School in "Engineering and Chemistry of Materials and Constructions", University of Messina, Italy. Title of the Ph.D Thesis: "Analysis of structural systems with interval uncertainties under deterministic and stochastic excitations" successfully defended in November 2019.
- Supervisor of the Ph.D student Eugenia Romeo, XXX cycle, Doctoral School in "Civil, Environmental and Safety Engineering", University "Mediterranea" of Reggio Calabria, Italy. Title of the Ph.D Thesis: "Finite element procedures for the analysis of structural systems with interval uncertainties" successfully defended in May 2018.

RESEARCH INTERESTS

- Modeling and propagation of uncertainties in engineering problems through probabilistic approaches:
  - Stochastic finite element analysis of structures with geometrical nonlinearities;
  - Dynamic analysis of suspended cables with uncertain pretension;
  - Stochastic analysis of structures with uncertain mechanical properties modeled as random variables subjected to non-stationary random processes;
  - Exact solutions for beams with random flexibility under deterministic static loads;
  - Analysis of non-local one-dimensional structures with uncertain mass density and Young's modulus modeled as random fields.
- Modeling and propagation of uncertainties in engineering problems through non-probabilistic approaches:
  - Static analysis of structures with uncertain geometrical and/or mechanical properties modeled as interval variables;
  - Time-domain and frequency-domain dynamic analysis of structures with uncertain geometrical and/or mechanical properties modeled as interval variables;

- Stochastic analysis of structures with uncertain mechanical properties modeled as interval variables subjected to stationary random excitations;
- Interval field model for the representation of spatially variable uncertainties;
- Static analysis of elastic Euler-Bernoulli and Timoshenko beams and of non-local elastic bars with uncertain Young's modulus modeled as an interval field;
- Finite element analysis of structures made of linear-elastic isotropic material with uncertain mechanical properties modeled as interval fields;
- Finite element analysis of composite laminates with uncertain mechanical properties modeled as interval fields.

- Modeling and propagation of uncertainties in engineering problems through hybrid approaches:
  - Static analysis of structures with uncertain mechanical properties modeled as random variables described by an "imprecise" probability density function (i.e. with interval basic parameters).

- Structural reliability:
  - Reliability analysis of structural systems with uncertain mechanical properties modeled as interval variables subjected to stationary random excitation;
  - Reliability sensitivity analysis of structures with uncertain mechanical properties modeled as interval variables subjected to stationary random excitation;
  - Fatigue analysis of structures with uncertain mechanical properties modeled as interval variables subjected to stationary random excitation;
  - Reliability analysis of structural systems with uncertain mechanical properties modeled as random variables described by an "imprecise" probability density function (i.e. with interval basic parameters);
  - Serviceability assessment of footbridges with uncertain structural and loading parameters modeled as interval variables.

- Nonlinear random vibrations
  - Approximate solution of the Fokker-Planck-Kolmogorov equation;
  - Stochastic analysis of linear and nonlinear systems subjected to sub-Gaussian random processes;
  - Stochastic analysis of lightly damped nonlinear systems subjected to Gaussian white noise;
  - Dynamic analysis of suspended cables under wind excitation;

- Step-by-step time integration techniques for nonlinear systems.

- Vehicle-structure dynamic interaction:
  - Analysis of Euler-Bernoulli beams crossed by moving oscillators;
  - Analysis of railway simply supported and suspension bridges;
  - Analysis of horizontal and inclined suspended cables crossed by moving masses or moving oscillators.

- Non-local elasticity:
  - Finite element analysis of two-dimensional non-local elastic problems;
  - Non-local Timoshenko beam theory;
  - Analysis of one-dimensional non-local elastic systems with uncertain mechanical properties modeled using either probabilistic or non-probabilistic approaches.

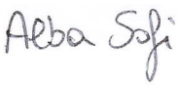
_PARTECIPATION TO NATIONAL AND INTERNATIONAL CONFERENCES AND MEETINGS

- The 29th European Safety and Reliability Conference" (ESREL2019), 22-26 September 2019, Leibniz Universität, Hannover (Germany) (Speaker).
- The 13th International Conference on Applications of Statistics and Probability in Civil Engineering (ICASP13), 26-30 May 2019 (South Korea) (Speaker).
- The 7th edition of the International Conference on Uncertainty in Structural Dynamics (USD 2018), 17-19 September 2018, Leuven (Belgium) (Speaker).
- The Tenth International Conference on Engineering Computational Technology (ECT 2018), 4-6 September 2018, Sitges (Spain) (Speaker, Session organizer and Chairman of a session).
- Workshop on Recent Advances in Mechanics (structural/solid) Dynamical Systems (deterministic/stochastic) Probability Theory (mathematical/applied), 5-6 March 2018, Palermo (Italy).
- 12th International Conference on Structural Safety and Reliability" (ICOSSAR 2017), 6-10 August, Vienna (Austria), (Speaker and Chairman of a session).
- 2nd International Conference on Uncertainty Quantification in Computational Sciences and Engineering (UNCECOMP 2017), 15 - 17 June 2017, Rhodes Island, Greece (Speaker and Mini-symposium organizer).
- 7th International Workshop on Reliable Computing (REC 2016), Computing with Polymorphic Uncertain Data, June 15-17, 2016| Ruhr University, Bochum, Germany (Speaker and Chairman of a session).
- XXII Conference - The Italian Association of Theoretical and Applied Mechanics (AIMETA 2015), September 14-17, 2015, Genoa (Italy) (Speaker).

- 1st International Conference on Uncertainty Quantification in Computational Sciences and Engineering (UNCECOMP 2015), 25 - 27 May 2015, Crete Island, Greece (Speaker, Mini-symposium organizer and Chairman of a session).
- 7th Computational Stochastic Mechanics Conference (CSM7)", June 15-18, 2014 Santorini (Greece) (Speaker).
- 2014 International Conference on Fractional Differentiation and its Applications, (ICFDA'14)", June 23-25, 2014, University of Catania, (Italy) (Speaker).
- Second International Conference on Vulnerability and Risk Analysis and Management & Sixth International Symposium on Uncertainty Modelling and Analysis (ASCE-ICVRAM-ISUMA 2014)", July 13-16, 2014, University of Liverpool (UK) (Speaker, Mini-symposium organizer and Chairman of a session).
- 11th International Conference on Structural Safety & Reliability (ICOSSAR 2013), June, 16-20, 2013 Columbia University, New York, NY (Speaker, Mini-symposium organizer and Chairman of a session).
- GADeS 2012, First meeting of GADES, AIMETA Group of Dynamics and Stability, October 19, 2012, University of Roma, "La Sapienza", Rome (Italy) (Speaker).
- Stochastic Mechanics 2012, Ustica (Palermo, Italy) June 7-10, 2012.
- XX Conference- The Italian Association of Theoretical and Applied Mechanics, Bologna (Italy) September 12-15, 2011 (Speaker).
- Eurodyn 2011, Eighth International Conference on Structural Dynamics, Leuven (Belgium) July 4-6, 2011 (Speaker).
- XIX Conference- The Italian Association of Theoretical and Applied Mechanics, Ancona (Italy) September 14-17, 2009 (Speaker).
- XVII Italian Conference of Computational Mechanics (GIMC 2008), Alghero (Italy), September 10-12, 2008 (Speaker).
- XVIII Conference- The Italian Association of Theoretical and Applied Mechanics, Brescia (Italy) September 11-14, 2007.
- International Symposium on Recent Advances in Mechanics, Dynamical Systems and Probability Theory (MDP), Palermo (Italy), June 3-6, 2007 (Speaker).
- Fifth International Conference on Computational Stochastic Mechanics (CSM5), Rhodos (Greece), June 21-23, 2006 (Speaker).
- Stochastic Mechanics '04, National Conference of the AIMETA of Stochastic Mechanics and Structural Reliability, Pantelleria (Italy) May 31-June 1, 2004 (Speaker).
- Ninth International Conference on Civil and Structural Engineering Computing, Egmond-aan-Zee (The Netherlands) September 2-4, 2003 (Speaker).
- XVI Conference- The Italian Association of Theoretical and Applied Mechanics, Ferrara (Italy) September 9-12, 2003 (Speaker).
- Eurodyn 2002, Fifth European Conference on Structural Dynamics, Munich (Germany) September 2-5, 2002 (Speaker).

- Fourth International Conference on Computational Stochastic Mechanics (CSM4), Kerkyra (Corfu), Greece, June 9-12, 2002 (Speaker).
- XV Conference- The Italian Association of Theoretical and Applied Mechanics, Taormina (Italy) September, 26-29, 2001.
- Fendis, Scientific Meeting at University of Roma "La Sapienza", Roma (Italy) July 9-11, 2001 (Speaker).
- Fourth International Symposium on Cable Dynamics, Montréal (Canada) May 28-30, 2001 (Poster Presentation).
- Euromech 413 Colloquium on: "Stochastic Dynamics of Nonlinear Mechanical Systems", Palermo (Italy) June 12-14, 2000 (Speaker).

Reggio Calabria, lì 28/08/2020 Alba Sofi



SCIENTIFIC PUBLICATIONS

International Journals

1. Sofi A, Muscolino G, Giunta F (2020). A Sensitivity-Based Approach for Reliability Analysis of Randomly Excited Structures With Interval Axial Stiffness, *ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering*, 6(4), 041008 (10 pages), ISSN: 2332-9017, DOI: doi.org/10.1115/1.4047574.

2. Sofi A, Muscolino G, Giunta F (2020). Propagation of uncertain structural properties described by imprecise probability density functions via response surface method, *Probabilistic Engineering Mechanics*, 60, 103020, 14 pages, ISSN: 0266-8920, DOI: 10.1016/j.probengmech.2020.103020.

3. Sofi A, Muscolino G, Giunta F (2019). Fatigue analysis of structures with interval axial stiffness subjected to stationary stochastic excitations, *Meccanica*, 54(9), pp. 1471-1487, ISSN: 0025-6455, DOI: 10.1007/s11012-019-01022-2.

4. Feng J, Li Q, Sofi A, Li G, Wu D, Gao W (2019). Uncertain structural free vibration analysis with non-probabilistic spatially varying parameters, *ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering*, 5(2), 021005-1 (12 pages), ISSN: 2332-9017, DOI: 10.1115/1.4041501.

5. Sofi A, Romeo E, Barrera O, Cocks A (2019). An interval finite element method for the analysis of structures with spatially varying uncertainties, *Advances in Engineering Software*, 128, pp. 1–19, ISSN: 0965-9978, DOI: 10.1016/j.advengsoft.2018.11.001.

6. Muscolino G, Sofi A, Giunta F (2018). Dynamics of structures with uncertain-but-bounded parameters via pseudo-static sensitivity analysis, *Mechanical Systems and Signal Processing*, 111, pp. 1–22, ISSN: 0888-3270, DOI: 10.1016/j.ymssp.2018.02.023.

7. Sofi A, Romeo E (2018). A unified response surface framework for the interval and stochastic finite element analysis of structures with uncertain parameters, *Probabilistic Engineering Mechanics*, 54, pp. 25-36, ISSN: 0266-8920, DOI: 10.1016/j.probengmech.2017.06.004.

8. Sofi A (2017). Euler-Bernoulli interval finite element with spatially varying uncertain properties, *Acta Mechanica*, 228(11), pp. 3771–3787, ISSN: 00015970, DOI: 10.1007/s00707-017-1903-7.

9. Muscolino G, Sofi A (2017). Analysis of structures with random axial stiffness described by imprecise probability density functions, *Computers & Structures*, 184, pp. 1-13, ISSN: 0045-7949, DOI: 10.1016/j.compstruc.2017.02.001.

10. Sofi A, Romeo E (2016). A novel Interval Finite Element Method based on the improved interval analysis, *Computer Methods in Applied Mechanics and Engineering*, 311, pp. 671–697, ISSN: 0045-7825, DOI: 10.1016/j.cma.2016.09.009.

11. Muscolino G, Santoro R, Sofi A (2016). Reliability assessment of structural systems with interval uncertainties under spectrum-compatible seismic excitations, *Probabilistic Engineering Mechanics*, 44, pp. 138–149, ISSN: 0266-8920, DOI: 10.1016/j.probengmech.2015.11.005.

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