



PROF. ENG. ROSSANA DIMITRI

School of Engineering – Università del Salento

PERSONAL DATA

Name ROSSANA DIMITRI
Nationality Italian
Date of birth 05/01/1980

WORK EXPERIENCE

- Date (from – to) 23.02.2019 – today
- Name and address of employer Università del Salento, Department of Innovation Engineering
Ed. La Stecca, via per Monteroni, 73100 Lecce (Italy)
- Position **Associate professor ICAR08**
- Main responsibilities Teaching and Research on “Mechanical modelling of complex materials and structures”.
- Main subjects of the research Development of effective and innovative computational models for structural problems at different scales, applicable to complex structures made of anisotropic materials.

- Date (from – to) 22.02.2016 – 22-02-2019
- Name and address of employer **Università del Salento**, Department of Innovation Engineering
Ed. La Stecca, via per Monteroni, 73100 Lecce (Italy)
- Position **Assistant professor ICAR08 – Researcher position RTD-B**
- Main responsibilities Teaching and Research on “Computational mechanical modelling of structural interfaces based on advanced numerical methods with a low computational cost”.
- Main subjects of the research Development of effective and innovative computational models for structural interfaces based on high-performing algorithms.

- Date (from – to) 03.06.2013 – 22.02.2016
- Name and address of employer **Università del Salento**, Department of Innovation Engineering
Ed. La Stecca, via per Monteroni, 73100 Lecce (Italy)
- Position **Assistant professor ICAR08 – Researcher position RTD-A**
- Main responsibilities Teaching and Research within the ERC Starting research grant “INTERFACES”, Grant agreement No. 279439, on “Computational mechanical modelling of structural interfaces based on isogeometric approaches”.
- Main subjects of the research Development of effective and innovative computational models for interfacial debonding, consistent with the actual mixed-mode behaviour at various scales. Modelling is placed in a continuum framework and implemented with the isogeometric method.

- Date (from – to) 01.06.2012 – 31.05.2013
- Name and address of employer **Università del Salento**, Department of Innovation Engineering
Ed. La Stecca, via per Monteroni, 73100 Lecce (Italy)
- Position **Research fellowship**
- Main responsibilities Research within the ERC Starting research grant “INTERFACES”, Grant agreement No. 279439, on “T-Splines-based isogeometric analysis of contact and debonding problems between deformable bodies in the context of large deformations”, advisors Profs. L De Lorenzis, G. Zavarise.
- Main subjects of the research Formulation and implementation of a contact algorithm within the FEAP code (by R. Taylor).

- Date (from – to) 01.06.2011 – 31.05.2012
- Name and address of employer Gottfried Wilhelm Leibniz Universität Hannover
Institut für Kontinuumsmechanik
Appelstraße 11, 30167 Hannover DeutschlandKontinuumsmechanik

- Position
 - Main responsibilities
 - Main subjects of the research
 - Date (from – to)
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 - Main responsibilities
 - Main subjects of the research
 - Date (from – to)
 - Name and address of employer
 - Position
 - Main responsibilities
 - Main subjects of the research
- Research fellowship**
 Research on “NURBS-based isogeometric analysis of contact problems between deformable bodies in the context of large deformations”, advisors Profs. L. De Lorenzis, P. Wriggers, G. Zavarise.
 Formulation and implementation of a contact algorithm within the FEAP code (by R. Taylor).
- 05.07.2010 – 31.05.2011
ENEA Research Centre of Brindisi, Unità Tecnica Tecnologie dei Materiali Compositi (UTTMATB-COMP)
 S.S. 7 Appia km 713.7, 72100 Brindisi
- Research fellowship**
 Research within a regional project “MIPER PS_095” (Innovative Materials and Methodologies for Products in Renewable Energy sector), advisor Dr. M. Nacucchi.
- Development and mechanical characterization of thermoplastic composites for structural components and adhesive joining of blades for small sized wind turbines operative in severe environmental conditions (high temperatures in sub-Saharan zones, very low temperatures on mountains, high humidity and UV ray exposure).
 - Development of thermoplastic composites, design and transformation processes for thermal solar panels.
- 08.01.2009 – 30.05.2010
PI.MAR. s.r.l.
 via A. Manzoni 32, 73020 Corsi (LE)
- External collaborator**
 Research on “Development of artificial stone materials containing limestone sludge as filler and structural elements for building construction”
 Experimental investigation and development of innovative building materials containing limestone sludge as filler, in collaboration with Prof. G. Zavarise and Italcementi Group-Brindisi. New artificial stones are designed and produced similarly to the actual ones extracted from local quarries (Cursi-Lecce). Improved durability and resistance properties are reached with the artificial stones, for similar colours and aspects and lower weights with respect to the actual stones. A simplified and inexpensive manufacturing technology is also designed to compete on the market.
- 01.06.2005 – 31.05.2006
Università degli Studi di Lecce, Department of Innovation Engineering
 Ed. La Stecca, via per Monteroni, 73100 Lecce
- Research fellowship**
 Research within a national project “R.E.S.I.S.” (Ricerca e Sviluppo per la Sismologia e l’Ingegneria Sismica) funded by MIUR. Supervisors Prof. Eng. A. La Tegola, Eng. L. De Lorenzis.
 Analytical and experimental investigation in the field of the strengthening of masonry vaulted structures with externally bonded composite fiber materials (FRP). The strengthening solution with FRP composites sheets at the intrados is studied and proposed to decrease the lateral thrust transmitted by arches and vaults to their buttresses, improving, at the same time, the global stability of the vaulted structures.

EDUCATION

- Date (from – to)
 - Name and type of educational institution
 - Main subjects / professional abilities of the studies
 - Qualification obtained
 - Level in the national classification
 - Title PhD Dissertation
 - Main subjects of the Dissertation
- 16.05.2010 – 28.11.2013
Università del Salento, Department of Innovation Engineering
 Ed. La Stecca, via per Monteroni, 73100 Lecce
 Analytical and numerical modeling of interfaces with isogeometric approaches
- PhD in “Industrial and Mechanical Engineering” (XXV cycle)**
 Degree obtained with unanimous agreement of the committee, thesis awarded by the Italian Group for Computational Mechanics (AIMETA) for the Italian selection of the 2013 ECCOMAS PhD Award.
 Isogeometric treatment of large deformation contact and debonding problems with NURBS and T-Splines
 Study on the performances of locally refined T-Spline-based IGA applied to 2D and 3D large deformation frictionless contact and debonding problems, as compared to NURBS (Non-Uniform-Rational-B-Splines) interpolations and standard C^0 -continuous Lagrange finite element

interpolations.

- Date (from – to) 01.06.2006 – 16.12.2009
 - Name and type of educational institution **Università del Salento**, Department of Innovation Engineering
Ed. La Stecca, via per Monteroni, 73100 Lecce
 - Main subjects / professional abilities of the studies Structural mechanics of arches and vaults under static and dynamic loading
 - Qualification obtained **PhD in “Materials and Structural Engineering” (XXI Cycle)**
 - Level in the national classification Degree obtained with unanimous agreement of the committee
 - Title PhD Dissertation Stability of Masonry Structures under Static and Dynamic Loads
 - Main subjects of the Dissertation Development and improvement of several strategies to better understand the safety and stability of masonry structures under static or dynamic loads. The limit analysis provides the theoretical basis to examine stability from the analytical point of view, while the discrete element method (DEM) is applied to model the discontinuous nature of masonry structures in a numerical sense.
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- Date (from – to) 01.11.1998 – 13.12.2004
 - Name and type of educational institution **Università degli Studi di Lecce**, Department of Innovation Engineering
Ed. La Stecca, via per Monteroni, 73100 Lecce
 - Main subjects / professional abilities of the studies Discipline previste dal curriculum studiorum in Ingegneria industriale
 - Qualification obtained **5-years degree (“Laurea”) in Materials Engineering (option: Civil Engineering)**
 - Level in the national classification 110/110 cum laude, thesis awarded with a scholarship from the University of Salento in memory of Eng. Gabriele De Angelis.
 - Title Dissertation Indagine teorico-sperimentale sul comportamento strutturale di sistemi voltati rinforzati con FRP (Theoretical and experimental investigation of the structural behavior of vaulted systems strengthened with FRP)
 - Main subjects of the Dissertation Numerical and experimental investigation in the field of the static behavior and failure modes of masonry edge vaults (a valuable part of the architectural and cultural heritage of the Salento peninsula) subjected to uniform loading and imposed displacements on the buttresses. In detail one scaled prototype of edge vaults is tested up to failure, to study the collapse behavior (mechanisms, masonry crushing and sliding along mortar joints) of the structure. Thus, based on the experimental observations, an appropriate arrangement of an externally bonded FRP reinforcement is proposed as efficient solution to decrease the lateral thrust transmitted by the vault to its buttresses. The experimental results are compared to the numerical ones obtained from the finite element method (FEM) using a commercial Code (STRAUS7) and a good agreement is found.
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- Date (from – to) 01.09.1993 – 20.07.1998
 - Name and type of educational institution Liceo Scientifico Galileo Galilei Manduria (TA), Italy
 - Main subjects / professional abilities of the studies High school education in humanities and science
 - Qualification obtained **High School degree (“Maturità scientifica”)**
 - Level in the national classification 60/60

PERSONAL ABILITIES AND COMPETENCES

Competences in the field of Structural mechanics, Solid Mechanics, Damage and Fracture Mechanics, Contact Mechanics, Isogeometric Analysis, High performances Finite Elements. Ability to interact with external institutions and industries for studies, research and consulting in applied technologies and technology transfer.

MOTHER TONGUE

ITALIAN

OTHER LANGUAGES

- Reading ability B2 (Common European Framework of Reference for Languages)
- Writing ability B2 (Common European Framework of Reference for Languages)
- Oral ability B2 (Common European Framework of Reference for Languages)

- Reading ability
- Writing ability
- Oral ability

GERMAN

Sufficient

Sufficient

Sufficient

FRENCH

- Reading ability
- Writing ability
- Oral ability

Good

Sufficient

Sufficient

**ORGANIZING ABILITIES AND
COMPETENCES**

EDITORIAL ACTIVITY

Since 2011 the undersigned collaborates as reviewer for the following journals:

- Acta Mechanica
- Active and Passive Electronic Components
- Aerospace Science and Technology
- AIAA Journal
- Applied Mathematical Modelling
- Applied Sciences
- Axioms
- Coatings
- Composites Part B
- Composite Structures
- Computational Mechanics
- Computational Particle Mechanics
- Computer Methods in Applied Mechanics and Engineering
- Communications in Nonlinear Science and Numerical Simulation
- Construction & Building Materials
- Engineering Computations
- Engineering Journal
- Engineering Science and Technology, an International Journal
- Engineering Structures
- Engineering Structures and Technologies
- European Journal of Environmental and Civil Engineering
- European Journal of Mechanics A/Solids
- Frontiers
- High Temperature Materials and Processes
- Indian Journal of Physics
- International Journal of Architectural Heritage
- International Journal of Aerospace Engineering
- International Journal of Mechanical Sciences
- International Journal of Mechanics and Materials in Design
- International Journal of Smart and Nano Materials
- International Journal of Solids and Structures
- International Journal of Structural Stability and Dynamics
- International Journal for Numerical Methods
- Iranian Journal of Science and Technology, Transactions of Civil Engineering
- Journal of the Brazilian Society of Mechanical Sciences and Engineering
- Journal of Aerospace Engineering
- Journal of Aircraft and Spacecraft technology
- Journal of Applied and Computational Mechanics
- Journal of Applied Mathematics
- Journal of Asian Architecture and Building Engineering
- Journal of Composites Science
- Journal of Computational and Applied Mathematics
- Journal of Computational Design and Engineering
- Journal of Computational Engineering and Physical Modeling
- Journal of Earthquake Engineering
- Journal of Materials in Civil Engineering
- Journal of Sandwich Structures and Materials

- Journal of the Mechanical Behavior of Materials
- Journal of Zhejiang University-SCIENCE A
- KSCE Journal of Civil Engineering
- Machines
- Materials Science
- Materials and Structures
- Materials Today Communications
- Mathematical Problems in Engineering
- Meccanica
- Mechanics Based Design of Structures and Mechanics, An International Journal
- Mechanics of Materials
- Metals
- Microscopy Research and Technique
- Multidiscipline Modeling in Materials and Structures
- Nanotechnology Reviews
- Nonlinear Engineering. Modeling and Application
- Part C: Journal of Mechanical Engineering Science
- Part J: Journal of Engineering Tribology
- Plos One
- Polymer Composites
- Proceedings of the institution of civil engineers, Structures and Buildings
- Science and Engineering of Composite Materials
- Separation Science and Technology
- Sigma Journal of Engineering and Natural Sciences
- Structural Concrete
- Structural Engineering and Mechanics, An International Journal
- Structures
- The European Physical Journal Plus
- Theoretical and Applied Fracture Mechanics
- Transactions of Nanjing University of Aeronautics and Astronautics
- Transportation Engineering
- Waves in Random And Complex Media
- Wood Material Science and Engineering
- ZAMM - Zeitschrift für Angewandte Mathematik und Mechanik

Since 2011 the undersigned has also collaborated as revisor for the following conference proceedings:

- GIMC-GMA, XX Convegno Nazionale di Meccanica Computazionale, 2014, Cassino, Italy.
- IBMAC, 16th International Brick and Block Masonry Conference, 2016, Padova, Italy.

TECHNICAL ABILITIES AND COMPETENCES

- Use of the computer with common use software, scientific software, Fortran, Qbasic and Matlab programming.
- Use of machines and instrumentation for mechanical tests of materials and structures.

COMMUNICATION SKILLS

- Strong communication skills and naturalness in public speaking developed in ten years of teaching experience and participation in national and international conferences as a speaker.
- Excellent skills in integration in multicultural environments.

ORGANIZATIONAL/MANAGERIAL SKILLS

- Strong ability to plan bureaucratic, logistical and administrative activities developed for the organization of courses, lectures, seminars and exams.
- Significant organizational and coordination skills as a scientific team member.

ARTISTIC ABILITIES AND COMPETENCES

Ten-years degree for the class of VIOLIN. **Conservatoire "Tito Schipa"**, Lecce (Italy). Exhibitions in public concerts as orchestra member and/or solo artist.

OTHER ABILITIES AND COMPETENCES

21.01.2010 – 31.05.2013: Designed "Cultore della materia" within the teaching collaboration in the classes of Structural mechanics I and II, and Computational mechanics. University of Salento,

Lecce (Italy).

DRIVING LICENSES

Italian driving licence B.

ATTENDED EDUCATION COURSES

- Summer school on “*Calcolo Avanzato (Advanced Computer science)*”, CASPUR Roma, 27 August-07 September 2012. Rome (Italy).
- Summer school on “*Isogeometric analysis: a new paradigm in the numerical approximation of PDEs*”, Cetraro (CS), 18-22 June 2012. Cetraro (Italy).
- Short course on “*Progettazione a fatica (Fatigue design)*”, Enginsoft, 18-20 June 2012. Brindisi (Italy).
- Short course on “*Creep e danno (Creep and damage)*”, Enginsoft, 4-6 July 2012. Brindisi (Italy).
- German course “*Deutsch als Fremdsprache*”, level A2-1, at the private school VHS, 07/02/2011-14/06/2012. Hannover (Germany).
- Basis German course “*Deutsch als Fremdsprache fur Wissenschaftlerinnen*”, at the Leibniz Univeristat Hannover, 15/09/2011-15/01/2012. Hannover (Germany).
- German course “*Deutsch als Fremdsprache*”, level A1-1, at the private school VHS, 06/09/2011-01/12/2011. Hannover (Germany).
- Short course on “*Metodi numerici per problemi di contatto (Numerical methods for contact problems)*”, Enginsoft, 3-4 June 2011. Brindisi (Italy).
- Short course on “*Introduzione alla progettazione con i materiali compositi (Introduction to design of composite materials)*”, Enginsoft, 22-24 September 2010. Brindisi (Italy).
- Summer school “*Materiali Compositi (Composite materials)*”, CETMA, 13-15 September 2010. Brindisi (Italy).
- 17th IUTAM Summer School on “*Modelling and Simulation of Multiscale Continuum Systems*”, CISM, 28 June-02 July, 2010, T. Zohdi e P. Papadopoulos. Udine (Italy).
- First International conference on “*Computational Contact Mechanics*”, 16-18 September 2009. Lecce (Italy).
- Course on “*modeFRONTIER*”, Università del Salento, 09-10 June, 2009. ESTECO/EnginSoft. Lecce (Italy).
- Course on “*Numerical Modelling of Concrete Cracking*”, CISM18-22 May, 2009, G. Hofstetter e G. Meschke. Udine (Italy).
- Course on “*Ansys Workbench*”, Università del Salento, April-May, 2009, G. Zavarise. Lecce (Italy).
- Academic course on “*Meccanica computazionale – modulo B (Computational Mechanics – Part B)*”, academic year 2008-2009, 54 hours, Università del Salento, School of Engineering, Prof. G. Zavarise. Lecce (Italy).
- Academic course on “*Meccanica computazionale – modulo A (Computational Mechanics – Part A)*”, academic year 2008-2009, 54 hours, Università del Salento, School of Engineering, Prof. G. Zavarise. Lecce (Italy).
- Short course “*Il metodo degli elementi finiti (The finite element method)*”, May-October 2007, 51 hours, Università del Salento, School of Engineering, Prof. G. Zavarise. Lecce (Italy).
- *English Course-level alte C1*, CLA, Courses of General English Language, 60 hours, January-June, 2007. Lecce (Italy).
- Meeting on “*Case silenziose ed ecosostenibili*”, Università degli studi di Lecce, School of Engineering, 20 December 2005. Lecce (Italy).
- Short course on “*Edifici ed Efficienza Energetica*”, Università degli studi di Lecce, School of Engineering, 26 November 2005. Lecce (Italy).
- Short course on “*Structural Assesment of Heritage Buildings*”, Rose School, 03 – 07 October 2005. Pavia (Italy).

AWARDS

FURTHER INFORMATION

- Highly Cited Paper 2022 “Y. Heydarpour, P. Malekzadeh, R. Dimitri, F. Tornabene (2020), “Thermoelastic Analysis of Functionally Graded Cylindrical Panels with Piezoelectric Layers”. Applied Sciences. Vol. 10(4), 1397, pp. 1-22, DOI: 10.3390/app10041397.
- Highly Cited Paper 2021 “M. Arefi, E.M.R. Bidgoli, R. Dimitri, F. Tornabene, J.N. Reddy (2019), Size-dependent free vibrations of FG polymer composite curved nanobeams reinforced with graphene nanoplatelets resting on Pasternak foundations”. Applied Sciences. Vol. 9(8), 1580, pp. 1-19, DOI: 10.3390/app9081580.
- Member of the American Society of Civil Engineers (ASCE) since 08/06/2021.
- Member of the Shell Buckling People website. <https://shellbuckling.com/people.php> since 2017.
- Member of the Italian Association SISCO, and teaching representative for the University of Salento (Società Italiana di Scienza delle Costruzioni) since 20/07/2018.
- Highly Cited Paper from Clarivate Analytics “S. Kamarian, M. Salim, R. Dimitri, F. Tornabene (2016) - “Free vibration analysis of conical shells reinforced with agglomerated carbon nanotubes”. International Journal of Mechanical Sciences. Vol. 108-109, pp. 157-165.
- Highly Cited Paper from Clarivate Analytics “N. Fantuzzi, F. Tornabene, M. Bacciocchi, R. Dimitri (2016) - Free vibration analysis of arbitrarily shaped Functionally Graded Carbon Nanotube-reinforced plates, Composite Part B 2016, 1-25”, - International conference “Multiscale Innovative Materials and Structures – MIMS16”, Cetara (Salerno), October 28-30, 2016.
- Scientific coauthor for the Best Student Paper Award “N. Fantuzzi, F. Tornabene, M. Bacciocchi, R. Dimitri - Free vibration analysis of arbitrarily shaped Functionally Graded Carbon Nanotube-reinforced plates, Composite Part B 2016, 1-25”, during the international conference “Multiscale Innovative Materials and Structures – MIMS16”, Cetara (Salerno), October 28-30, 2016.
- ECCOMAS Award for the PhD theses 2013 on Computational Methods in Applied Sciences and Engineering (winner for the Italian selection with the thesis entitled “*Isogeometric treatment of large deformation contact and debonding problems with NURBS and T-Splines*”).
- Member of the Italian Association of Theoretical and Applied Mechanics AIMETA since 01/01/2013.
- Gabriele De Angelis Award for the best 5-year Degree Thesis 2004 (winner for the local selection at Università del Salento, Department of Innovation Engineering, Lecce, with the thesis entitled “*Indagine teorico-sperimentale sul comportamento strutturale di sistemi voltati rinforzati con FRP (Theoretical and experimental investigation of the structural behavior of vaulted systems strengthened with FRP)*”).

PROFESSIONAL HABILITATIONS

Habilitated as Professional Engineer in June 2005. Registered Professional Engineer since 18/10/2006 in the Province of Taranto, n. 2344.

SCIENTIFIC HABILITATIONS

Habilitated as Associate Professor in the area 08/B2 in July 2017.

DIRECTION OR PARTICIPATION TO THE EDITORIAL BOARD OF JOURNALS AND BOOK SERIES

- Editorial Board Member for the Universal Journal of Nanoscience, Universal Wiser Publisher <https://ojs.wiserpub.com/index.php/UJN/about/editorialTeam>
- Editorial for the Special Issue “Recent Advances in Theoretical and Computational Modeling of Composite Materials and Structures Appl. Sci. 2022, 12, 4715. <https://doi.org/10.3390/app12094715>
- Guest Editor for the Special Issue “Advanced Theoretical and Computational Methods for Complex Materials and Structures (Volume 2)” for Applied Sciences (Deadline for manuscript submissions: 31 December 2022). https://www.mdpi.com/journal/applsci/special_issues/complex_materials_v2
- Guest Editor for the Special Issue “Theoretical and Computational Modeling of Advanced Materials and Structures” for Computer Modeling in Engineering & Sciences (Deadline for manuscript submissions: 30 June 2022). https://www.techscience.com/CMES/special_detail/struc
- Review Editor in “Solid and Structural Mechanics” (Since 09/08/2021)

<https://www.frontiersin.org/journals/mechanical-engineering/sections/solid-and-structural-mechanics#editorial-board>

- Associate Editor in Practice Periodical on Structural Design and Construction, ASCE, (Since 27/05/2021) <https://ascelibrary.org/page/ppscfx/editorialboard>
- Editorial for the Special Issue Book “Advanced Theoretical and Computational Methods for Complex Materials and Structures” for Applied Sciences <https://www.mdpi.com/2076-3417/11/6/2532>
- Associate Editor in Frontiers in Built Environment, “Computational Methods in Structural Engineering section” (Since 01/03/2021) <https://www.frontiersin.org/journals/built-environment/sections/computational-methods-in-structural-engineering#editorial-board>
- Academic Editor for the journal “Mathematical Problems in Engineering”, Hindawi, (since 18/06/2020). <https://www.hindawi.com/journals/mpe/editors/>
- Guest Editor for the Special Issue “Recent Advances in Theoretical and Computational Modeling of Composite Materials and Structures” for Applied Sciences (Deadline for manuscript submissions: 31 December 2020). https://www.mdpi.com/journal/applsci/special_issues/Theoretical_and_Computational_Modeling
- Guest Editor for the Special Issue “Structural Mechanics of Composite Materials and Structures” for Molecules (Deadline for manuscript submissions: 30 September 2020). https://www.mdpi.com/journal/molecules/special_issues/Mechanics_Structures
- Topical Advisory Panel – Topic Board Member - in “Nanomaterials” (Since 2020) https://www.mdpi.com/journal/nanomaterials/topic_editors
- Guest Editor for the Special Issue “Advanced Mechanical Modeling of Nanomaterials and Nanostructures” for Nanomaterials (Deadline for manuscript submissions: 30 May 2020). (ISSN 2079-4991) https://www.mdpi.com/journal/nanomaterials/special_issues/mechanical_modeling
- Member of the Editorial Board for the Journal ALKÜ Fen Bilimleri Dergisi, ALKU Journal of Science <http://dergipark.gov.tr/alku/board>
- Member of the Editorial Board for Structural and Computational Mechanics Book Series [ISSN: 2421-2822] <http://www.editrice-esculapio.com/structural-and-computational-mechanics-book-series/>
- Member of the Editorial Board and Associate Editor for the journal Curved and Layered Structures [ISSN: 2353-7396] <http://www.degruyter.com/view/j/cls>
- Guest Editor for the Special Issue “Advanced Composite Materials Applied to Structural Mechanics” for Journal of Composite Science. Deadline for manuscript submissions: closed (30 April 2018). http://www.mdpi.com/journal/jcs/special_issues/composite_structural_mechanics
- Guest Editor for the Special Issue “Advanced Theoretical and Computational Methods for Complex Materials and Structures” for Applied Sciences. Deadline for manuscript submissions: closed (31 January 2020). https://www.mdpi.com/journal/applsci/special_issues/complex_materials

CONFERENCE ORGANIZATIONS

- 2022: Director of the MiniSymposium MS-23 “Advanced mechanical modeling of composite materials and structures” for the International Conference on Nonlinear Solid Mechanics, ICoNSoM 2022, 13-16 June, Alghero, Italy. <http://www.memocsevents.eu/iconsom2022/mini-symposia/>
- 2022: Member of the International Scientific Committee for the Contact Mechanics International Symposium CMIS 2022, 23-25 May 2022, Chexbres, Switzerland. <https://cmis2022.epfl.ch/>
- 2020: Director of the MiniSymposium “Advanced modeling of complex materials and structures” for the WCCM XIV– ECCOMAS 2020, 19-24 Paris, France. <https://www.wccm-eccomas2020.org/>
- 2019: Director of the MiniSymposium MS-42 “Advanced mechanical modeling of composite materials and structures” for the International Conference on Nonlinear Solid Mechanics, ICoNSoM 2019, 16-19 June, Rome, Italy. <http://www.memocsevents.eu/iconsom2019/mini-symposia/>
- 2018: Director of the MiniSymposium MS-036 “Advanced Modelling of Composite Materials and Structures” for the International Conference on Computational Methods, ICCM 2018, 6-10 August, Rome, Italy. <http://sci-en->

[tech.com/ICCM/index.php/ICCM2018/ICCM2018/schedConf/trackPolicies](http://www.sci-en-tech.com/ICCM/index.php/ICCM2018/ICCM2018/schedConf/trackPolicies)

- 2018: Member of the International Organizing Committee for the International Conference on Computational Methods, ICCM 2018, 6-10 August, Rome, Italy. <http://www.sci-en-tech.com/ICCM2018/ICCM2018committees.pdf>
- 2018: Member of the International Scientific Advisory Committee for the International Conference on Computational Methods, ICCM 2018, 6-10 August, Rome, Italy. <http://www.sci-en-tech.com/ICCM2018/ICCM2018committees.pdf>
- 2018: Member of the International Scientific Committee for the Contact Mechanics International Symposium CMIS 2018, 14-16 May 2018, Biella, Italy. <http://conference.unisalento.it/ocs/index.php/cmis/index/pages/view/committees>
- 2017: Scientific Secretary for the 5th International Conference on Computational Contact Mechanics, ICCCM 2017, 5-7 July 2017, Lecce, Italy. <http://conference.unisalento.it/ocs/index.php/icccm/index/pages/view/committees>
- 2015: Member of the Local Organizing Committee for the 86th Annual Meeting of the International Association of Applied Mathematics and Mechanics, GAMM 2015, 23-27 March, Lecce, Italy. <http://conference.unisalento.it/ocs/index.php/gamm/index/pages/view/committees?#LocalOrganizingCommittee>

PARTICIPATION TO RESEARCH GROUPS

- 2022: Responsabile Unità (Unit of Università del Salento), for the proposal PRIN2022, with the title "MEANS - Mechanical properties and Experimental And Numerical analysis of doubly-curved free-form Structures produced via 3D printing technology", (submitted). Prot. 20224X882P.
- 2021: PON Financed – DOT1312707 – Programma Operativo Nazionale Ricerca e Innovazione 2014-2020 "Dottorati Innovativi a Caratterizzazione Industriale - XXXVI Cycle" – (85743,06 euro) -115th/330 place.
- 2020: Responsabile Unità (Unit of Università del Salento), for the proposal PRIN2020, with the title "Analysis and design of periodic and meta/composite materials and structures", (admitted but not financed). Prot. 20205TAN49_005.
- 2020: Member of the group of experts in Modeling and Simulation at the University of Salento for GTI – Ministry of Defense.
- 2019: Submission of a research proposal for the SSD ICAR/08 at the University of Salento, entitled "Approcci numerici per lo studio del fenomeno di delaminazione in materiali innovativi" (Numerical approach for the study of the delamination in innovative materials). Fondo di ricerca Dipartimentale, delibera consiglio di amministrazione N. 244 del 26.09.2018 (admitted but not financed).
- 2019: Submission of a regional proposal for the SSD ICAR/08, University of Salento, Department of Innovation Engineering, entitled "Control of Eolic GENERators VIBrations (CEGENVIB) - Controllo delle vibrazioni nei generatori eolici", Progetto REFIN – Research for Innovation- Regione Puglia (admitted but not financed).
- 2018: Responsabile Unità (Unit of Università del Salento), for the proposal PRIN2017, with the title "Homogenization Methods in Materials & Structures – HOMM&S", South line (admitted with 90/100 but not financed). Prot. 201785RPK7.
- 2017: Annual individual financing by ANVUR2017 (3000 euro), "Fondo per le attività base di ricerca", ex art. 1, commi 295 e seguenti, della Legge 11 dicembre 2016 n. 232.
- 2016 – 2018: scientific collaboration with the University of Bologna (DICAM) (Prof. F. Tornabene) and the Texas University (Department of Mechanical Engineering Advanced Computational Mechanics Laboratory) (Prof. J.N. Reddy) for the "structural modelling of composite plates and shells through the implementation of some advanced numerical methods with a low computational cost".
- 2016 – 2018: Partecipazione all'Accordo di collaborazione tra Università del Salento (Lecce) ed il Centro di Ricerca in Scienza e Tecnica per la conservazione del Patrimonio Storico-Architettonico (CISTeC), Roma, in qualità di referente scientifico per il settore Scienza delle Costruzioni insieme al prof. G. Zavarise.

- 2016 – 2018: Participation to PRIN 2015 - Advanced mechanical modeling of new materials and structures for the solution of 2020 Horizon challenges. Resp. Scientifico Prof. Zavarise Giorgio. University of Salento. Lecce.
- 2012 - 2015: Participation to ERC – Mechanical modeling of interfaces in advanced materials and structures (INTERFACES), Resp. Scientifico Prof. De Lorenzis Laura. University of Salento. Lecce.
- 2011 – 2012: Collaboration as visiting scientist with the Institut für Kontinuumsmechanik Gottfried Wilhelm Leibniz Universität Hannover, Prof. P. Wriggers. Germany.
- 2010 - 2012: Participation to PRIN 2008 - Meccanica del contatto e della frattura: aspetti numerici e applicazioni di tecnologia avanzata. Prot. 2008SE9TBA_003, Resp. Scientifico Prof. Zavarise Giorgio. University of Salento. Lecce.
- 2010 - 2011: Participation to the regional project MIPER PS_095 – Innovative Materials and Methodologies for Products in Renewable Energy sector. UTTMATB-COMP ENEA. Brindisi.
- 2009: Application of a proposal MISPE (Materiali Innovativi da Scarti, Per l'Edilizia Sostenibile), PO Puglia per il FSE 2007/2013. Future in research 19/2009.
- 2008: Participation to Bando Futuro in Ricerca 2008 – Meccanica della frattura, della decoesione e del contatto per materiali innovativi. Resp. Unità di ricerca De Lorenzis Laura, Coord. Scientifico Paggi Marco. Codice, RBFR08MUSF_002, durata 36 mesi. University of Salento. Lecce.
- 2005 - 2006: Participation to “R.E.S.I.S.” (Ricerca e Sviluppo per la Sismologia e l'Ingegneria Sismica. Soggetti attuatori: INGV con ENEA, Consorzio TRE, Consorzio CETMA, Università degli Studi di Lecce, D'Appolonia Spa.

LECTURES

- 2022: Course for PhD students (3rd level) entitled “Fracture mechanics in science and technology: from theory to applications”. Doctoral Course in Ingegneria dei Materiali e delle Strutture e Nanotecnologie, Università del Salento, Lecce.
- 30/06/2022: Lecture for the SMARTenance Summer School, entitled “Sicurezza Strutturale: Una condicio sine qua non per uno sviluppo sostenibile”, Università del Salento, Lecce.
- 2021: Course for PhD students (3rd level) entitled “Bidimensional structures in composite materials: Theory and applications”. Doctoral Course in Ingegneria dei Materiali e delle Strutture e Nanotecnologie, Università del Salento, Lecce.
- 16/10/2020: Webinar for the international journal “Nanomaterials” entitled “Advanced Mechanical Modeling of Nanomaterials and Nanostructures”. <https://nanomaterials-1.sciforum.net/>; https://www.sisco-scienzadellecostruzioni.org/wp-content/uploads/2020/09/Nanomaterials_Webinars_2020.pdf; https://nanomaterials-1.sciforum.net/#webinar_content.
- 18/11/2016: Lecture within the PhD program of the Texas A&M University, entitled “Isogeometric Analysis: an innovative frontier of integration between FEM and CAD”. Texas A&M University.
- 24/11/2016: Seminar for PhD students entitled “Isogeometric analysis: a CAD-FEM integration for interfacial fracture and contact mechanics problems”. Alma Mater Studiorum, Bologna.

TEACHING

- Academic year 2021–2022: lecturer for the class of **Scienza delle Costruzioni (Structural Mechanics)**, 12 CFU, School of Civil Engineering, Università del Salento; lecturer for the class of **Teoria delle Strutture (Theory of Structures)**, 6 CFU, School of Civil Engineering, Università del Salento; lecturer for the class of **Dinamica delle Strutture (Structural Dynamics)**, 6 CFU, School of Civil Engineering, Università del Salento.
- Academic year 2020–2021: lecturer for the class of **Scienza delle Costruzioni (Structural Mechanics)**, 12 CFU, School of Civil Engineering, Università del Salento; lecturer for the class

of **Teoria delle Strutture** (Theory of Structures), 6 CFU, School of Civil Engineering, Università del Salento.

- Academic years 2018–2019, 2019–2020: lecturer for the class of **Scienza delle Costruzioni A+B** (Structural Mechanics A+B), 12 CFU, School of Civil Engineering, Università del Salento; lecturer for the class of **Scienza delle Costruzioni** (Structural Mechanics), 9 CFU, School of Industrial Engineering, Università del Salento; lecturer for the class of **Complementi di Scienza delle Costruzioni** (Structural Mechanics II), 6 CFU, School of Civil Engineering, Università del Salento.
- Academic years 2016–2017, 2017–2018: lecturer for the class of **Scienza delle Costruzioni A** (Structural Mechanics A), 6 CFU, School of Civil Engineering, Università del Salento.
- Academic year 2014–2015: lecturer for the class of **Scienza delle Costruzioni** (Structural Mechanics), 12 CFU, School of Civil Engineering, Università del Salento.
- Academic years 2012–2013, 2013–2014: lecturer for the class of **Complementi di Scienza delle Costruzioni** (Structural Mechanics II), 6 CFU, School of Civil Engineering, Università del Salento.

TEACHING ASSISTANTSHIP

Academic year 2009 – 2018: teaching assistantship for the classes of

- Scienza delle Costruzioni (Structural Mechanics), Prof. G. Zavarise, School of Engineering, Università del Salento.
- Meccanica computazionale (Computational Mechanics), Prof. G. Zavarise, School of Engineering, Università del Salento.

Academic year 2008 – 2012: teaching assistantship for the class of

- Complementi di Scienza delle Costruzioni (Structural Mechanics II), Ing. L. De Lorenzis, School of Engineering, Università del Salento.

Academic year 2006 – 2007: teaching assistantship for the class of

- Statica e Recupero Strutturale dei Beni Architettonici (Static and Structural Rehabilitation of the Architectural Heritage), Ing. L. De Lorenzis, Inter-school course in Technologies for the Cultural Heritage, Università del Salento.

Academic year 2005 – 2006: teaching assistantship for the class of

- Statica e Recupero Strutturale dei Beni Architettonici (Static and Structural Rehabilitation of the Architectural Heritage), Ing. L. De Lorenzis, Inter-school course in Technologies for the Cultural Heritage, Università del Salento.

TUTORSHIP FOR ADVANCED COURSES

Academic year 2021 – 2024: Tutor of the PhD student Martina Rinaldi, XXXVII ciclo, Corso di Dottorato di ricerca in “Ingegneria dei Materiali e delle Strutture e Nanotecnologie”, Università del Salento.

Academic year 2020 – 2023: Tutor of the PhD student Matteo Viscoti, XXXVI ciclo, Corso di Dottorato di ricerca in “Ingegneria dei Materiali e delle Strutture e Nanotecnologie”, Università del Salento.

Academic year 2019 – 2020: Tutor of the student Matteo Viscoti, Advanced School ISUFI, Area delle Scienze Naturali, Lecce, on the topic “Higher order shear deformation theory of auxetic shells”.

THESIS TUTORSHIP

Cotutor of Bachelor degree theses

- [1] Mattia Brancone, Bachelor Degree in Industrial Engineering, academic year 2012/2013: “Analisi statica di giunzioni adesive ibride mediante tecniche isogeometriche (Static analysis of adhesive hybrid joints with isogeometric techniques)”. Università del Salento, Italy.
- [2] Mariarita De Rinaldis, Bachelor Degree in Mechanical Engineering, academic year 2012/2013: “Analisi statica di strutture voltate in muratura con tecniche isogeometriche (Static analysis of masonry vaulted structures with isogeometric techniques)”. Università del

Salento, Italy.

- [3] Luisa Perlangeli, Bachelor Degree in Industrial Engineering, academic year 2012/2013: "Risoluzione approssimata del problema elastico con tecniche isogeometriche (Approximate resolution of the elastic problem with isogeometric techniques)". Università del Salento, Italy.
- [4] Tiziana Sergi, Bachelor Degree in Industrial Engineering, academic year 2012/2013: "Analisi isogeometrica per lo studio di interfacce in materiali eterogenei (Isogeometric analysis for the study of interfaces in heterogeneous materials)". Università del Salento, Italy.
- [5] Andrea Trevisi, Bachelor Degree in Industrial Engineering, academic year 2011/2012: "Integrazione tra modellazione geometrica e analisi FEM con tecniche isogeometriche (Integration between geometrical modeling and FEM analysis with isogeometric techniques)". Università del Salento, Italy.

Cotutor of Master degree theses

- [1] Graziano Lazzari, Master Degree in Material Engineering, academic year 2006/2007: "Studio della risposta dinamica di sistemi arco-portale in muratura (Study of the dynamic response of arch-portal systems)". Università del Salento, Italy.

Tutor of Master degree theses

- [1] Vincenzo Russo, Master Degree in Civil Engineering, academic year 2016/2017: "Analytical and numerical study of a new debonding model under mixed-mode conditions". Università del Salento, Italy.
- [2] Antonio Tommaso Nicolardi, Master Degree in Civil Engineering, academic year 2017/2018: "Grid shells: studio numerico del comportamento strutturale di gusci a semplice e doppia curvatura". Università del Salento, Italy.
- [3] Maria Rosaria Toma, Master Degree in Civil Engineering, academic year 2018/2019: "Ottimizzazione dell'impiego di sensori piezoelettrici per il controllo tensionale in una struttura in calcestruzzo armato" (Optimization of the use of piezoelectric sensors for stress monitoring in a reinforced concrete structure). Università del Salento, Italy.
- [4] Morgana Turrisi, Master Degree in Civil Engineering, academic year 2018/2019: "Analisi FEM della conducibilità termica di serramenti per civile abitazione" (FEM Analysis of the thermal conductivity for civil engineering doors and windows). Università del Salento, Italy.
- [5] Sushil Prajapat, Master Degree in Civil Engineering, academic year 2019/2020: "Modellazione numerica del legame di aderenza tra FRP (Fiber Reinforced Polymers) e Calcestruzzo al variare della temperatura" (Numerical analysis of the adhesion between FRP and a concrete substrate for a varying temperature). Università del Salento, Italy.
- [6] Matteo Viscoti, Master Degree in Civil Engineering, academic year 2019/2020: "Analisi Dinamica di pannelli sandwich curvi: teorie di ordine superiore e tecniche di omogenizzazione" (Dynamic analysis of curved sandwich panels: Higher Order Theories and Homogenization Modelling). Università del Salento, Italy.
- [7] Martina Rinaldi, Master Degree in Civil Engineering, academic year 2019/2020: "Modellazione computazionale FEM/XFEM dei processi di fratturazione 3D in geomateriali anisotropi stratificati" (Computational modeling based on FEM/XFEM of the 3D fracturing processes in anisotropic layered geomaterials). Università del Salento, Italy.
- [8] Marta Taurino, Master Degree in Civil Engineering, academic year 2019/2020: "Ottimizzazione topologica nella progettazione strutturale di ponti: dalla travata all'arco o alla capriata" (Design and optimization of bridges: From girder to arch or truss bridges). Università del Salento, Italy.

Tutor of Bachelor degree theses

a.a. 2014/2015

- [1] Bianco Giulia, Bachelor Degree in Civil Engineering: "Analisi di fenomeni di instabilità nelle travature reticolari da ponte (Analysis of the instability phenomena in truss systems for bridges)". Università del Salento, Italy.
- [2] Chiarelli Monica, Bachelor Degree in Civil Engineering: "Modello di zona coesiva bilineare per lo studio del rinforzo di elementi ad arco (Bilinear cohesive zone model for the study of the reinforcement in arched-elements)". Università del Salento, Italy.
- [3] Cruschi Serena, Bachelor Degree in Civil Engineering: "Modelli coesivi accoppiati derivati da

potenziale: confronto analitico e numerico (Coupled potential-based cohesive models: a analytical and numerical comparison)". Università del Salento, Italy.

- [4] De Luca Emanuela, Bachelor Degree in Civil Engineering: "Studio della consistenza fisica del modello di zona coesivo PPR (Study on the physical consistency for the PPR cohesive zone model)". Università del Salento, Italy.
- [5] Lerna Michela, Bachelor Degree in Civil Engineering: "Limiti di validità del modello di zona coesiva di Xu-Needleman: studio analitico (Limits of efficiency for the cohesive zone model by Xu-Needleman: analytical study)". Università del Salento, Italy.
- [6] Orlando Virginia, Bachelor Degree in Civil Engineering: "Confronto fra soluzioni numeriche di piastre rettangolari e analisi IGA (Comparison between numerical and IGA-based solutions for rectangular plates)". Università del Salento, Italy.
- [7] Palmieri Andrea, Bachelor Degree in Civil Engineering: "Studio analitico degli andamenti tensionali e deformativi in una lastra forata (Analytical study of the stresses and deformations in a perforated rectangular plate with a central circular hole)". Università del Salento, Italy.
- [8] Renni Angela, Bachelor Degree in Civil Engineering: "Problemi di interfaccia nel distacco di rinforzi in composito da substrati curvi (Debonding problems between composite reinforcements and curved substrates)". Università del Salento, Italy.
- [9] Rotundo Emanuele, Bachelor Degree in Civil Engineering: "Fenomeni di instabilità non euleriana per strutture intelaiate (Phenomena of non-Eulerian instability of beam structures)". Università del Salento, Italy.
- [10] Russo Vincenzo, Bachelor Degree in Civil Engineering: "Studio analitico del distacco di modo I in interfacce a comportamento elasto-plastico (Analytical study of the Mode-I debonding in elastic-plastic interfaces)". Università del Salento, Italy.
- [11] Sozzo Eugenio, Bachelor Degree in Civil Engineering: "Teoria approssimata ed esatta per sollecitazioni da taglio nel solido di De Saint Venant (Exact and approximated theory for shear stresses within an elastic De Saint Venant solid)". Università del Salento, Italy.
- [12] Strafella Alberto, Bachelor Degree in Civil Engineering: "Comportamento meccanico di un volume di riferimento al variare dell'interfaccia fibra-matrice (Mechanical behaviour of a reference for varying fibre-matrix interfaces)". Università del Salento, Italy.
- [13] Strafella Davide, Bachelor Degree in Civil Engineering: "Studio parametrico sull'instabilità di strutture ad arco di forma variabile (A parametric study on the instability of arched structures with variable shapes)". Università del Salento, Italy.
- [14] Verbena Marco, Bachelor Degree in Civil Engineering: "Analisi di pannelli sandwich alveolari mediante la teoria della trave alla Timoshenko (Analysis of the web-core sandwich panels based on the Timoshenko beam theory)". Università del Salento, Italy.

a.a. 2015/2016

- [1] Adamuccio Gianluca, Bachelor Degree in Civil Engineering: "Validazione mediante analisi isogeometrica di soluzioni di piastre (Isogeometric validation for plates solutions)". Università del Salento, Italy.
- [2] Corvaglia Marialucia, Bachelor Degree in Civil Engineering: "Confronti numerico-sperimentale del fattore di intensificazione degli sforzi nella meccanica della frattura elastica lineare (Numerical/experimental comparison for the stress intensity factor within the linear elastic fracture mechanics)". Università del Salento, Italy.
- [3] Greco Antonella, Bachelor Degree in Civil Engineering: "Influenza della geometria nei problemi di interfaccia delle superfici curve (Influence of the geometry on the interfacial problems of curved surfaces)". Università del Salento, Italy.
- [4] Maniglio Luciano, Bachelor Degree in Civil Engineering: "Analisi del distacco di modo misto mediante peel test (Analysis of the mixed-mode debonding in peel tests)". Università del Salento, Italy.
- [5] Marra Paola, Bachelor Degree in Civil Engineering: "Legge polinomiale nello studio di problemi di interfaccia (Polynomial cohesive law for interfacial studies)". Università del Salento, Italy.
- [6] Raho Marco, Bachelor Degree in Civil Engineering: "Strutture tensegrali: studio di un modello (Tensegrity structures: study of a model)". Università del Salento, Italy.

- [7] Verardo Umberto, Bachelor Degree in Civil Engineering: "Analisi isogeometrica delle soluzioni in forma chiusa di piastre ellittiche (Isogeometric analysis of elliptic plates)". Università del Salento, Italy.
- [8] Vergara Maria, Bachelor Degree in Civil Engineering: "Validazione analitica di una legge di zona coesiva alternativa (Analytical validation of an alternative cohesive zone law)". Università del Salento, Italy.

a.a. 2016/2017

- [1] Belgiovine Vincenzo, Bachelor Degree in Civil Engineering: "Analisi parametrica del fattore di intensificazione degli sforzi di elementi piani in condizioni di modo misto (Parametric analysis of the stress intensity factor of plane elements in mixed-mode conditions)". Università del Salento, Italy.
- [2] Guacci Pamela, Bachelor Degree in Civil Engineering: "Indagine parametrica del comportamento di un rinforzo su superficie curva all'estradosso (Parametric investigation of the behavior of a reinforcement at the extrados of a curved surface)". Università del Salento, Italy.
- [3] Taurino Marta, Bachelor Degree in Civil Engineering: "Studio numerico del distacco di modo misto di superfici curve rinforzate all'estradosso (Numerical study of the mixed-mode debonding of curved surfaces reinforced at the extrados)". Università del Salento, Italy.

a.a. 2017/2018

- [1] Arnesano Chiara, Bachelor Degree in Civil Engineering: "Studio analitico del distacco di modo I in laminati compositi (Analytical study of the mode-I debonding in laminated composites)". Università del Salento, Italy.
- [2] Congedo Marta, Bachelor Degree in Civil Engineering: "Studio analitico e numerico basato sul GDQ del distacco di modo misto in interfacce curve (Theoretical and numerical study based on the GDQ method of the mixed-mode delamination in curved specimens)". Università del Salento, Italy.
- [3] Filoni Emanuele, Bachelor Degree in Civil Engineering: "Modellazione teorica e numerica del distacco di modo misto in provini compositi curvilinei (Theoretical and numerical modeling of the mixed-mode delamination in composite curved specimens)". Università del Salento, Italy.
- [4] Gulizia Giovanni, Bachelor Degree in Civil Engineering: "Indagine parametrica della risposta strutturale di delaminazione in provini curvi di varia forma (A parametric investigation of the delamination response in curved specimens of different shapes)". Università del Salento, Italy.
- [5] Iaconisi Melani Lucia, Bachelor Degree in Civil Engineering: "Modello teorico innovativo per lo studio del distacco di modo II in interfacce coesive (Innovative theoretical model for the delamination study of cohesive interfaces in mode-II conditions)". Università del Salento, Italy.
- [6] Leo Aurora, Bachelor Degree in Civil Engineering: "Studio numerico del distacco di modo misto in provini curvi (Numerical study of the mixed-mode decohesion of interfaces)". Università del Salento, Italy.
- [7] Martina Silvia, Bachelor Degree in Civil Engineering: "Studio analitico del problema della delaminazione di modo misto (Analytical study of the mixed-mode delamination problem)". Università del Salento, Italy.
- [8] Quarta Mauro, Bachelor Degree in Civil Engineering: "Studio analitico dell'interfaccia fibramatrice a comportamento elastico (Analytical study of the fiber-reinforcement interface with elastic behavior)". Università del Salento, Italy.
- [9] Sticchi Matteo, Bachelor Degree in Civil Engineering: "Modello analitico innovativo per lo studio del distacco di modo misto di interfacce composite (Innovative analytical modeling for the study of the mixed-mode delamination in composite interfaces)". Università del Salento, Italy.
- [10] Viscoti Matteo, Bachelor Degree in Civil Engineering: "Sviluppo di un nuovo modello coesivo per lo studio della delaminazione di interfacce ortotrope (Development of a novel cohesive model for the delamination study in orthotropic interfaces)". Università del Salento, Italy.

a.a. 2018/2019

- [1] Albanese Paola Maria, Bachelor Degree in Industrial Engineering: "Confronto della forma esatta e approssimata per l'analisi statica della cupola del Brunelleschi (Theoretical and

approximated comparison for the static analysis of the Brunelleschi dome)". Università del Salento, Italy.

- [2] Carrozzo Fabio, Bachelor Degree in Industrial Engineering: "Analisi statica di una ruota a raggi mediante il metodo degli elementi finiti (Static analysis of a wheel with the finite element method)". Università del Salento, Italy.
- [3] Congedo Stefano, Bachelor Degree in Civil Engineering: "Materiali autoriparanti da costruzione (Self-healing building materials)". Università del Salento, Italy.
- [4] Giorgino Carmen, Bachelor Degree in Industrial Engineering: "Analisi termomeccanica agli elementi finiti di un sistema frenante a disco per uso automobilistico (Thermomechanical finite element analysis of automotive disk brake system)". Università del Salento, Italy.
- [5] Guerrieri Irene Rosaria, Bachelor Degree in Civil Engineering: "Studio analitico del comportamento coesivo di modo misto di un DCB sottoposto a carico trasversale (Analytical study of the mixed-mode cohesive response of a DCB under a transverse loading)". Università del Salento, Italy.
- [6] Ivagnes Anna, Bachelor Degree in Industrial Engineering: "Materiali self-healing: studio di un modello di zona coesiva mediante approccio termodinamico (Self-healing materials: study of a cohesive zone model through a thermodynamical approach)". Università del Salento, Italy.
- [7] Girardo Marta, Bachelor Degree in Industrial Engineering: "Materiali functionally graded: confronto fra soluzione analitica esatta e approssimata di elementi piani (Functionally-graded materials: comparison between an exact and approximate in-plane solution)". Università del Salento, Italy.
- [8] Marando Marta, Bachelor Degree in Industrial Engineering: "Analisi FEM del regime tensionale e termico per un pistone di un motore Diesel (FEM analysis of the thermal and tensional state for a piston of a Diesel engine)". Università del Salento, Italy.
- [9] Notaro Andrea, Bachelor Degree in Civil Engineering: "Studio numerico dei modi di vibrare di strutture composite a guscio mediante tecniche di calcolo avanzate (Numerical study of the vibration modes for composite shell structures through advanced computational techniques)". Università del Salento, Italy.
- [10] Serafino Giancarlo, Bachelor Degree in Industrial Engineering: "Indagine parametrica e realizzazione della funzione delle tensioni per lo studio della torsione in travi di sezione ellittica (Parametric study and realization of the stress function for the torsional study in beams of elliptic shape)". Università del Salento, Italy.
- [11] Taurino Patrick Maurizio, Bachelor Degree in Civil Engineering: "Studio del comportamento coesivo di modo I di un peel test in materiale isotropo (Study of the mode I cohesive behavior of a peel test in isotropic material)". Università del Salento, Italy.

a.a. 2019/2020

- [1] Canei Lisa, Bachelor Degree in Industrial Engineering: "Analisi agli elementi finiti di una scocca di vettura da competizione (Finite element analysis of a racing car monocoque)". Università del Salento, Italy.
- [2] De Medici Claudia, Bachelor Degree in Industrial Engineering: "L'uso dei materiali compositi e pannelli sandwich nell'ingegneria meccanica: indagine esplorativa sulle prestazioni meccaniche (Use of composite materials and sandwich panels in the mechanical engineering: a survey on the mechanical properties)". Università del Salento, Italy.
- [3] Leo Emanuele, Bachelor Degree in Industrial Engineering: "Studio teorico-numerico del comportamento meccanico di serbatoi in pressione (Theoretical-numerical study of the mechanical behavior of pressure vessels)". Università del Salento, Italy.
- [4] Leone Matteo, Bachelor Degree in Industrial Engineering: "Indagine parametrica sul comportamento di elementi bidimensionali piani (Parametric investigation on the behavior of two-dimensional plane elements)". Università del Salento, Italy.
- [5] Maggiore Giacomo, Bachelor Degree in Civil Engineering: "Applicazione di profili pultrusi in elementi strutturali sostenibili per l'ingegneria civile (Application of pultruded profiles in sustainable structural elements for civil engineering)". Università del Salento, Italy.
- [6] Miglietta Paolo Andrea, Bachelor Degree in Civil Engineering: "Analisi di fenomeni di instabilità in piastre sottili (Analysis of buckling phenomenon in thin plates)". Università del Salento, Italy.
- [7] Sergi Melissa, Bachelor Degree in Civil Engineering: "Analisi FEM del ponte Maillart come

soluzione intermedia tra il ponte a travata e il ponte ad arco: il caso studio del ponte Ciolo (FEM-based analysis of the Maillart bridge as intermediate solution between the girder bridge and the arch bridge: The Ciolo Bridge case study)". Università del Salento, Italy.

a.a. 2020/2021

- [1] Melfi Giulia, Bachelor Degree in Industrial Engineering: "Analisi FEM della risposta strutturale di una pala eolica in FRP per differenti combinazioni fibra-matrice (FEM analysis of the structural response of a FRP wind blade for different fiber-matrix combinations)". Università del Salento, Italy.

OTHER ACADEMIC RESPONSIBILITIES

- 25.05.2022: Reference member for the University of Salento for the national PhD course in "Defense against natural risks and ecological transition of built environment", XXXVIII cycle, Capofila Università degli Studi di Catania.
- 16.05.2022: Member of the committee ICAR/08 II Fascia comma 5, "Procedura valutativa per la copertura di 1 posto di Professore di II fascia, ai sensi dell'art. 24, comma 5 della Legge 30.12.2010 n. 240 per il S.S.D. ICAR/08 - 2022Ilvalc5011 - DICEAA riservato al Dott.IVAN GIORGIO", Università degli Studi dell'Aquila.
- 20.10.2021: Member of the committee for a RTD-A selection at the Università degli studi di Napoli Federico II, per le esigenze del Dipartimento di Strutture per l'Ingegneria e l'Architettura (codice identificativo – PON_GREEN_RTDA_2021_53). D.R/2021/4282 del 20/10/2021.
- 27.07.2021: External member for the evaluation of the project BRS00384 - A new super-fast and accurate isogeometric analysis approach to the simulation of shape-changing artery stents—towards patient-tailored 4D printed stents (ISOSTent4D), Università degli Studi di Firenze. Dipartimento di Ingegneria Civile e Ambientale (DICEA), ERC PE8_4 Computational Engineering.
- 13.07.2021: Internal member of the examination committee for the PhD admission in Ingegneria dei Materiali e delle Strutture e Nanotecnologie, XXXVII cycle, University of Salento.
- 19.07.2021: Member of the examination committee for the final exam of XXXIII cycle for the PhD course in Aerospace Engineering of Politecnico of Turin. PhD candidate Roberto Torre, dissertation manuscript "Theoretical, numerical, and experimental methodologies for structural analysis of polymeric aeronautical elements produced via additive manufacturing".
- 05.08.2020: External member for the evaluation of the project BRS00278 - Flows of Suspended Grains: An Analytical and Computational Approach with Applications, Università degli Studi di Ferrara. Decreto n. 490/2020. Prot. n. 58176 del 17/04/2020.
- 20.06.2019 – 01.03.2020: Member of the Professor Boarding for the Engineering Professional habilitation, Università del Salento, Lecce (Italy).
- 03.06.2019: Member of the committee for the evaluation of the candidates for 3 RTD-A selections at the Università dell'Aquila (Linea 1 e n. 7 Rtd A Linea 2 a valere sul D.D. MIUR n. 407 del 27.02.2018 "A.I.M. Attrazione e Mobilità Internazionale" - (PON) Ricerca e Innovazione 2014 – 2020). D.R. Rep. n. 543 - 2019 - Prot. n. 23154 del 03.06.2019.
- 13.03.2019 – today: Member of the Professor Doctorate Boarding in Ingegneria dei Materiali e delle Strutture e Nanotecnologie, (cycle XXXV, XXXVI, XXXVII), Università del Salento, Lecce (Italy).
- 01.10.2018 – today: Committee chairman for the evaluation exams in Structural Mechanics (bachelor degree), for the courses of Civil Engineering and Industrial Engineering, Università del Salento, Lecce (Italy); and Structural Mechanics II (Complementi di Scienza delle Costruzioni), for the course of Civil Engineering Engineering (Master degree), Università del Salento, Lecce (Italy).
- Academic years 2017 – 2018: Member of panel for the student careers in Civil Engineering, Università del Salento, Lecce, Italy.
- Academic years 2017 – 2018: Member of the orientation program organized by the C.O.R.T. for the upper-school students, in quality of professor in Civil Engineering, Università del Salento, Lecce, Italy.
- Academic years 2015 – today: Co-examiner for the evaluation of master theses, in Civil

Engineering, Università del Salento, Italy.

- Academic years 2013 – today: Faculty Member for the evaluation, admission and individual academic training to the Master Course of Civil Engineering, Università del Salento, Italy.
- Academic years 2014 – today: Faculty Member for the admission to the Bachelor Course of Engineering, CISIA tests, Università del Salento, Italy.
- Academic year 2014–today: Organization member for the “Open days” welcome and orientation program addressed to upper-school students, in quality of professor in Civil Engineering, Università del Salento, Lecce, Italy.
- 20.1.2014 – today: Tester responsibility at Università del Salento, Lecce, Italy, as support to transportation services for Puglia and Basilicata regions, based on the deliberation CIPE n. 83 and 103/2009 and n. 34/2012.
- 21.01.2010 – 01.10.2018: Member of the examination panel for the classes of Structural Mechanics I and II, and Computational Mechanics. Università del Salento, Lecce (Italy).
- Academic years 2007 – 2009: Activity of tutorship for PhD Students. Winner of a 2-years - fellowship, at Università del Salento. Department of Innovation Engineering, Lecce (Italy). DR n. 368 of 09/02/2007.

PUBLICATIONS

FURTHER INFORMATION

Publications in international journals:

- [1] F. Tornabene, M. Viscoti, **R. Dimitri** (2022),
“Static analysis of anisotropic doubly-curved shells with arbitrary geometry and variable thickness resting on a Winkler-Pasternak support and subjected to general loads”. *Engineering Analysis with Boundary Elements*, 2022, Vol. 140, 618–673, DOI: 10.1016/j.enganabound.2022.02.021.
- [2] F. Tornabene, M. Viscoti, **R. Dimitri** (2022),
“Equivalent single layer higher order theory based on a weak formulation for the dynamic analysis of anisotropic doubly-curved shells with arbitrary geometry and variable thickness”. *Thin-Walled Structures*, 2022, Vol. 174, 109119, DOI: 10.1016/j.tws.2022.109119.
- [3] M. Babaei, F. Kiarasi, K. Asemi, **R. Dimitri**, F. Tornabene (2022),
“Transient Thermal Stresses in FG Porous Rotating Truncated Cones Reinforced by Graphene Platelets”. *Applied Sciences*. Vol. 12(8), 3932, DOI: 10.3390/app12083932.
- [4] A. Seyfi, A. Teimouri, **R. Dimitri**, F. Tornabene (2022),
“Dispersion of elastic waves in functionally graded CNTs-reinforced composite beams”. *Applied Sciences*. Accepted for publication.
- [5] M.O. Belarbi, L. Li, M.S. Ahmed Houari, A. Garg, H.D. Chalak, **R. Dimitri**, F. Tornabene (2022),
“Nonlocal vibration of functionally graded nanoplates using a layerwise theory”. *Mathematics and Mechanics of Solids*. DOI: 10.1177/10812865221078571.
- [6] P. Jeyaraman, S. Mahesh, R. Selvamani, **R. Dimitri**, F. Tornabene (2022),
“Multi thermal waves in a thermo diffusive piezo electric functionally graded rod via refined multi-dual phase-lag model”. *Curved and Layered Structures*, Vol. 9(1), 105–115, DOI: 10.1515/cls-2022-0010.
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- [8] Merzouki T., Ahmed H.M.S., Bessaim A., Haboussi M., **R. Dimitri**, F. Tornabene, (2022),
“Bending analysis of functionally graded porous nanocomposite beams based on a non-local strain gradient theory”. *Mathematics and Mechanics of Solids*. Vol. 27(1), 66–92, DOI: 10.1177/10812865211011759.
- [9] **R. Dimitri**, M. Rinaldi, M. Trullo, F. Tornabene, C. Fidelibus (2021),
“FEM/XFEM modeling of the 3D fracturing process in transversely isotropic geomaterials”. *Composite Structures*. Vol. 276, 114502, DOI: 10.1016/j.compstruct.2021.114502.

- [10] S. Merdaci, H.M. Adda, B. Hakima, **R. Dimitri**, F. Tornabene (2021), "Higher-order free vibration analysis of porous functionally graded plates". *Journal of Composites Science*. Vol. 5(11), 305, DOI: 10.3390/jcs5110305.
- [11] F. Kiarasi, M. Babaei, K. Asemi, **R. Dimitri**, F. Tornabene (2021), "Three-dimensional buckling analysis of functionally graded saturated porous rectangular plates under combined loading conditions". *Applied Sciences (Switzerland)*. Vol. 11(21), 10434, DOI: 10.3390/app112110434.
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- [18] F. Tornabene, M. Viscoti, **R. Dimitri**, J.N. Reddy (2021), "Higher order theories for the vibration study of doubly-curved anisotropic shells with a variable thickness and isogeometric mapped geometry". *Composite Structures*. Vol. 267, 113829, DOI: 10.1016/j.compstruct.2021.113829.
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- [1] **R. Dimitri** (2013),
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- [2] **R. Dimitri** (2009),
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- [1] **R. Dimitri** (2004),
"Indagine teorico-sperimentale sul comportamento strutturale di sistemi voltati rinforzati con FRP (Theoretical and experimental investigation of the structural behavior of vaulted systems strengthened with FRP)", *5-Degree thesis in "Materials Engineering", Department of Innovation Engineering, University of Salento, Italy.*

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Chairman in International and National Conferences:

- [1] *ICoNSoM, International Conference on Nonlinear Solid Mechanics, Session 1, MS41, 17 June 2019, Rome, Italy.*
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In fede

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