

Curriculum Vitae

Name: Francesco,

Family Name: dell'Isola,

ITALIAN CITIZEN

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ISI WEB Researcher ID: A-3648-2010

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Degrees and distinctions:

1986 Laurea in Fisica (M.Sc.) Università di Napoli Federico II

1992 Dottorato per la ricerca in Fisica Matematica (Ph.D.) Ministero per la Ricerca Scientifica e Tecnologica Roma Italia. Thesis title: Rational Thermodynamics of Nonmaterial Bidimensional Continua.

1995 Qualification aux fonctions de Maître de Conférences 60ème sect. n.9526040753 8/2/1995
Paris France

2004 Adjunct Associate Professor Virginia Polytechnic Institute and State University

2005 Idoneità Nazionale alle funzioni di Professore Ordinario, Commissione Nazionale presso
Università di Roma La Sapienza. (Full professorship qualification)

Patent obtained by US Patent office. United States Patent 6546316. Two dimensional network of actuators for the control of damping vibrations. Net-Control systems of structural vibrations co-inventors: Edmund Henneke, Stefano Vidoli

Career and Teaching Activity

1988-1991 Professore Incaricato (temporary appointment as Professor) del Corso Analisi Matematica II (Advanced Calculus) Facoltà di Scienze Economiche e Sociali Università del Molise Campobasso Italia

1990-1993 Professore Incaricato (temporary appointment as Professor) del Corso di Biomeccanica Facoltà di Medicina – Università di Napoli Federico II

1991-1992 Ricercatore s.s.d. Fisica Matematica (Tenured Assistant Professor) Facoltà di Scienza Matematiche-Fisiche e Naturali Università di Napoli Federico II

1992-1998 Ricercatore s.s.d. (Tenured Assistant Professor) Scienza delle Costruzioni Facoltà di Ingegneria-Università di Roma La Sapienza

1993 Maître de Conférences Course in Solid Mechanics Université de Toulon et du Var

1995 Maitre de Conferences Course in Continuum Mechanics Université de Aix-Marseille III

1995-1998 Professore Supplente (temporary appointment as Professor) del Corso di Scienza delle Costruzioni Facoltà di Ingegneria- Università di Roma La Sapienza

1998- 2006 Professore Associato (Associate Professor) gruppo H07A Scienza delle Costruzioni Facoltà di Ingegneria- Università di Roma La Sapienza

1998-to present Member of the Doctoral School in Teoretical and Applied Mechanics (membro del Collegio dei Docenti del Dottorato in Meccanica Teorica ed Applicata) Università di Roma “La Sapienza”

2000 Visiting Associate Professor Corso di Elasticità Virginia Polytechnical Institute and State University

2005 Professeur invité à l'Université de Versailles

2006-2009 Professore Straordinario di Scienza delle Costruzioni Facoltà di Ingegneria Università di Roma “La Sapienza”

2009-to present Professore Ordinario di Scienza delle Costruzioni Facoltà di Ingegneria Università di Roma “La Sapienza”

2009 Membro del Consiglio Didattico–Scientifico del [Master Internazionale di Secondo Livello Analisi e Controllo delle Vibrazioni in Applicazioni Civili ed Industriali](#), Università degli studi di Roma “La Sapienza”, Dipartimento di Ingegneria Strutturale e Geotecnica Dipartimento di Meccanica e Aeronautica

2014-2015 Visiting Professor at Università degli Studi di Catania in the context of the course “piezo-electromechanical systems” coordinated by Prof. Massimo Cuomo

2014-2016 In charge of the course “Mathematical Models for Engineering” at Warsaw University of Technology, (co-teaching with Prof. Tomasz Lekszycki).

Administrative Responsibilities:

2003-2033 Scientific Responsible: Laboratorio Strutture e Materiali Intelligenti Cisterna di Latina

2012 – to present Member of the Executive Committee of the Research Center M&MoCS, University of L'Aquila

2014 – 2018 Membre du Conseil scientifique de l'Institut des sciences de l'ingénierie et des systèmes – CNRS

2015 – 2018 Member of the Council of the Research Center CERFIS, University of L'Aquila, as representative of the International Research Center M&MoCS

Editorial Board Membership

Membership of Editorial Boards of International Journals:

2014 – to present Member of [European Journal of Environmental and Civil Engineering](#) (EJECE)

2014 – to present [PNRPU Mechanics Bulletin](#)

March 2013 Guest Editor (with Samuel Forest) of the [Special Issue of Continuum Mechanics and Thermodynamics](#). Pursuing the Progress of Mechanics, in the Spirit of the Founders, a Special Issue on the occasion of the retirement of Prof. Gianpietro Del Piero, Vol. 25, Issue 2-4, March 2013

2013 – to present Editor of [Continuum Mechanics and Thermodynamics](#)

2012- to present [Mathematics and Mechanics of Solids](#)

2012 – to present Co-Founder of [Mathematics and Mechanics of Complex Systems](#) (M&MoCS)

2012 – to present The Book series of [Modern Mechanics and Mathematics](#)

2002 – to present [International Journal of Electromagnetics and Mechanics](#)

2000 – to present [Research in Nondestructive Evaluation](#) (RNDE)

Doctoral and Selection Committees

Professor dell'Isola has been either supervisor or member of the Doctoral Committees for the following candidates:

2000 – Dr Stefano Vidoli (Doctor of Philosophy in Theoretical and Applied Mechanics at Università di Roma La Sapienza). Title: *“Structures and control: continuum integrated models”*

2002 – Dr Giulio Sciarra (Doctor of Philosophy in Theoretical and Applied Mechanics at Università di Roma La Sapienza — Docteur en Mécanique at Université du Sud-Toulon Var). Title: *“Modeling of a fluid flux through a solid deformable matrix”*

2005 – Dr Maurizio Porfiri (Doctor of Philosophy in Theoretical and Applied Mechanics at Università di Roma La Sapienza — University of Toulon). Title: *“Performances of passive electric networks and piezoelectric transducers for beam vibration control”*

2005 – Dr Corrado Maurini (Doctor of Philosophy in Theoretical and Applied Mechanics at Università di Roma La Sapienza — Université Pierre et Marie Curie, Ecole Doctorale SMAE). Title: *“Piezoelectric composites for distributed passive electric control: beam modelling, modal analysis, and experimental implementation”*

2006 – Dr Maurizio Porfiri (Doctor of Philosophy in Engineering Mechanics at Virginia Polytechnic Institute and State University). Title: *“Analysis by meshless local Petrov-Galerk in method of material discontinuities, pull-in instability in MEMS, vibrations of cracked beams, and finite deformations of rubber like materials”*

2006 – Dr Luca Placidi (Doctor of Philosophy in Theoretical and Applied Mechanics at the Department of Mechanical Engineering and Aeronautics University La Sapienza in Rome). Title: *“Microstructured Continua treated by Theory of Mixtures”*

2009 – Dr Angela Madeo (Doctor of Philosophy in Theoretical and Applied Mechanics at Università di Roma La Sapienza). Title: *“Variational Techniques in Poroelasticity”*

2009 – Dr Lachouette Damien, at Institute de Mathématiques de Toulon et du Var, Université du Sud Toulon-Var, Toulon (France). Title: *“Modélisation d’une interface fluide/ solide avec érosion. Application à l’érosion interne”*

2010 – Dr Giuseppe Rosi (Doctor of Philosophy in Theoretical and Applied Mechanics at Università di Roma La Sapienza and Université Pierre et Marie Curie, (Paris 6), Institut Jean Le Rond d’Alembert, Spécialité Mécanique). Title: *“Control of sound radiation and transmission by means of passive piezoelectric networks: modelling, optimization and experimental implementations”*

2011 – Dr Roberto Paccapeli (Doctor of Philosophy in Theoretical and Applied Mechanics at Università di Roma La Sapienza and Université Pierre et Marie Curie, (Paris 6), Institut Jean Le Rond d’Alembert, Spécialité Mécanique). Title: *“Control for mechanical system in smart structures: variational approaches for detecting damage”*

2013 – Dr Daniel Ahmad (Doctor of Philosophy at Doctoral School MEGA, Université de Lyon). Title: *“Analyse et simulation de film de la déformation de film polymères de décoration au cours de leur mise en form”*

2014 – Dr Antoine Rallu (Doctor of Philosophy at the Laboratoire Génie Civil et Bâtiment (L.G.C.B.) – ENTPE/INSA de Lyon, France). Title: *“Dynamique à basses et moyennes fréquences demilieux hétérogènes périodiques”*

2014 –Dr Daria Scerrato (Doctor of Philosophy in Theoretical and Applied Mechanics at Università di Roma La Sapienza and Doctoral School MEGA, LGCIE/INSA-Lyon, France, Spécialité Mécanique). Title: *“Effect of micro-particle addition on frictional energy dissipation and strength of concrete: experiments and modelling”*

2014 –Dr Manuel Ferretti (Doctor of Philosophy in Ingegneria e Modellistica Fisico-Matematica at Università dell’Aquila and Doctoral School MEGA, LAMCOS/INSA-Lyon, France, Spécialité Mécanique). Title: *“Non-linear mechanics of generalized continua and applications to composite materials”*

2014 – Dr George Noel Djoufedie (Doctor of Philosophy in Ingegneria e Modellistica Fisico-Matematica at Università dell’Aquila, Italy). Title: *“Non-strictly hyperbolic systems of conservations laws arising in oil recovery”*

2015 – Dr Khaled El Nady (Doctor of Philosophy at the École Doctorale Mécanique et Energétique de l’Université de Lorraine, Nancy, France). Title: *“Nonlinear constitutive models for lattice materials by discrete homogenization methods at large strains. Application to membranes and textiles”*

2016 – Dr Julie AL-HOUT (Doctor of Philosophy at Doctoral School MEGA, INSA de Lyon). Title: *“Etudes Expérimentales et Numériques du comportement des structures en Pisé et en Maçonnerie : Apport de la MED”*.[Convocation](#)

2016 – Dr Ba Tam TRUONG (Doctor of Philosophy at Doctoral School MEGA, INSA de Lyon). Title: *“Formulation, performances mécaniques, applications du matériau TRC pour le renforcement et réparation de structure en béton/ et béton armé : Approches expérimentale et numérique”*. [Convocation](#)

Other Memberships

2005 – Member of the Selection Committee for the assignment of a research fellowship of four years at the Dipartimento di Ingegneria Strutturale e Geotecnica, Università La Sapienza di Roma, sector ICAR /08 Scienza delle Costruzioni. Title: *“Strutture Intelligenti: Modellazione e metodi per il controllo della risposta e dello stato di integrità strutturale”*. Candidate: Dr Luca Placidi

2006 – Member of the Selection Committee for the position of associate professor at the facoltà di INGEGNERIA, Università degli Studi di CATANIA, sector ICAR /08 Scienza delle Costruzioni

2009 – Member of the Selection Committee for the assignment of a fellowship of three months at Dipartimento di Ingegneria Strutturale e Geotecnica, Università La Sapienza di Roma. Title: *“Dinamica nonlineare di corpi continui soggetti a impatto”*. Candidate: Dr Luca Placidi

2010 – Member of the Selection Committee for the assignment of a research fellowship of one year at the Dipartimento di Strutture dell’Università ROMA TRE, sectors MAT/07, FIS/01 and ICAR /08 Scienza delle Costruzioni. Title: *“Controllo attivo e passivo di vibrazioni in elementi strutturali tramite reti piezoelettriche: modellazione, sintesi e sviluppo sperimentale”*. Candidate: Dr Luca Placidi

2014 – Member of the Commission for the “Habilitation à diriger les Recherches” at Laboratoire des Sciences de l’Ingénieur de l’Informatique et de l’Imagerie (ICUBE), Strasbourg. Candidate: Dr Daniel George

2014 – Member of the Selection Committee for the position of associate professor at the Dipartimento di Architettura, Università degli Studi di ROMA TRE, sector 08/B2 S.S.D. ICAR /08 Scienza delle Costruzioni

2014 – Member of the Commission for the “Habilitation à diriger les Recherches” at LGCIE, INSA-Lyon, Villeurbanne, Lyon. Candidate: Dr Angela Madeo

2016 – Member of the Commission for the “Habilitation à diriger les Recherches” at Université de Toulon, France. Candidate: Dr Luca Placidi

Invited presentations

1988

1. two seminars at IPPT PAN, Warsaw June 1988

1991

2. one seminar at the Vth International Meeting on Waves and Stability in Continuous Media, 1991

1994

3. one seminar at LMM Université Pierre et Marie Curie, Paris VI, October 1994
4. one seminar at the 30th Polish Solid Mechanics Conference, Zakopane, 5-9 September 1994

1995

5. one seminar at Laboratoire d'Aérodynamique du CNRS, GDR Fluides en Microgravité, Meudon, 25 September 1995
6. two seminars at the University of Rostock Institute for Mathematics, December 1995

1996

7. two seminars at the Engineering Science and Mechanics Department Virginia TECH, February 1996
8. [one seminar](#) at Alenia Spazio S.p.A., Salaria, 1996-97. Title: *“Paralleli storici e formali fra la teoria del continuo deformabile e le equazioni di Maxwell: un'applicazione alla teoria della piezoelettricità per il progetto di strutture spaziali”*

1997

9. [one seminar](#) at Alenia Spazio S.p.A., stabilimento Globalstar, 1997-98. Title: *“La teoria del continuo deformabile e le equazioni di Maxwell: applicazioni della piezoelettricità allo smorzamento di vibrazioni in travi reticolari”*
10. two seminars at the EUROMECH CONFERENCE n.366, ESSEN 1997
11. one seminar at the Conference Free Boundary problems: Theory and Applications, Crete 1997
12. one seminar on Piezoelectromechanical structures at Dipartimento di fisica Università di Napoli, March 1997

1998

13. [one seminar](#) at Alenia Spazio S.p.A., stabilimento Globalstar, 1998-99. Title: *“Paralleli storici e formali fra la teoria del continuo deformabile e le equazioni di Maxwell: un'applicazione alla teoria della piezoelettricità per il progetto di strutture spaziali”*
14. one invited lecture at the Institute of Applied Mechanics (Civil Engineering) University of Stuttgart, February 1998
15. one seminar at the Department of Mechanics, Darmstadt University of Technology, February 1998

1999

16. [one seminar](#) at Alenia Spazio S.p.A., stabilimento Globalstar, 1999-2000. Title: *“Controllo di vibrazioni per mezzo di attuatori piezoelettrici”*
17. one seminar at DISAT Università dell'Aquila, March 1999

2001

18. one seminar on Net Control Systems at the Engineering School Leonard de Vinci (ESILV), Pole Universitaire Leonard de Vinci , Paris La Defense, September 2001
19. six lectures on Smart Structures at the AMAS Center of Excellence, Warsaw 2001
20. one seminar at the Conference in honour of Prof. K. Hutter's 60th birthday, Seeheim Germany 2001
21. one seminar on Applied Electromagnetics and Mechanics at 10th International Symposium , Tokyo Japan 13-16 May 2001

2002

22. one seminar at LMM Université Pierre et Marie Curie, Paris VI, June 2002
23. one invited lecture at the Conference "*Contemporary Research in Theoretical and Applied Mechanics*", Virginia Polytechnic Institute and State University, Blacksburg 23-28 June 2002
24. one seminar at 34th Solid Mechanics Conference, Institute of Fundamental Technological Research Center of Mechanics and Information Technology and Committee of Mechanics of the Polish Academy of Sciences , Zakopane 2-7 September 2002

2003

25. one seminar at the International Symposium on Applied Electromagnetics and Mechanics Versailles France 2003
26. [one seminar](#) at IUTAM Symposium on Physicochemical and Electromechanical Interactions in Porous Media, Eindhoven University of Technology Department of Biomedical Engineering, Congress Centre Rolduc, Kerkrade, The Netherlands 18-23 May 2003. Title: "*A second gradient model for deformable porous matrices filled with an inviscid fluid*"

2007

27. [one seminar](#) at 8e COLLOQUE NATIONAL EN CALCULUS DES STRUCTURES, 21-25 May 2007, Giens (Var). Title: "*Poutres composites piézoélectriques : modélisation des effets 3D, validations numériques et expérimentales*"
28. one seminar at ANLA Université de Toulon et du Var, June 2007
29. one presentation at the XXXI Convegno AMASES , Lecce Italy 3-6 settembre 2007

2009

30. one seminar at ANLA Université de Toulon et du Var, July 2009. Title: "*Piezoelectromechanical Structures: application to vibration damping*"

2010

31. one invited lecture at the Coussy Memorial Symposium, EMI California USC Viterbi School of Engineering , 8-11 August 2010
32. two seminars at Sperlonga Summer School on Mechanics and Engineering Sciences, Sperlonga (Italy), 20-24 September 2010. Titles: "*The Tetrahedon Argument for higher gradient theories*" and "*Flow in deformable porous media Boundary Conditions at Material properties discontinuity surfaces*"

33. one seminar at the Università degli Studi di Catania for the Dottorato di Ricerca in Ingegneria Strutturale e Geotecnica on 18 November 2010. Title: “*Stato di tensione nei continui di secondo gradiente. Applicazione ai sistemi continui ‘microscopicamente’ eterogenei*”

2011

34. one lecture at the Dipartimento di Fisica Università di Tor Vergata, Roma 17 gennaio 2011. Titolo del seminario: “*Principio dei Lavori Virtuali in Meccanica del Continuo*”

35. [one lecture](#) at Incontro Scientifico per il settantesimo compleanno del Prof. Antonio Romano, Napoli 3 febbraio 2011

36. [one seminar](#) at Laboratoire Sols Solides Structures Risques, Université Joseph Fourier, Grenoble 31 march 2011. Title: “*The variational approach in porous media*”

37. [one seminar](#) at Laboratoire IUSTI, Technopôle de Château-Gombert, Marseille 27 May 2011. Title: “*Contact actions in N-th gradient Continua an application to wave propagation*”

38. four seminars at Università degli Studi di Napoli “FedericoII”- Polo delle Scienze e delle Tecnologie- Dipartimento di Matematica e Applicazioni “Renato Caccioppoli”, Napoli 19 May 2011, 8-10 June 2011. Titles: “*Continui di N-simo gradiente. I concetti di geometria differenziale e teoria delle distribuzioni necessari alla formulazione di modelli coerenti*”

39. [one seminar](#) at Workshop on Vibrational energy transport and dissipation, National Science Foundation & University of Rome Faculty of Engineering of La Sapienza, Roma 6-7 June 2011. Title: “*Piezo-ElectroMechanical Structures*”

40. [one seminar](#) at the Università degli Studi di Perugia for the Dottorato di Ricerca in Ingegneria Civile e Materiali Innovativi on 24 June 2011. Title: “*Metodi Variazionali nella Meccanica del Continuo: Continui di ennesimo gradiente e applicazioni*”.

41. [seminars](#) at 2nd International Conference on Material Modelling incorporating the 12th European Mechanics of Materials Conference , Ecole des Mines de Paris, August 31st-September 2nd, 2011 Paris, France.

42. one seminar at Symposium in honour of Gianpietro Del Piero, First Sperlonga Summer School on Mechanics and Engineering Sciences, Sperlonga (Italy), 26-30 September 2011. Title: “*Contact actions in N-th gradient Continua*”

43. [one seminar](#) at Fédération francilienne de mécanique matériaux, structure, procédés, Ecole des Mines de Paris, October 13th, 2011 Paris, France. Title: “*The structure of contact actions in N-th gradient generalized continua : a generalization of the Cauchy tetrahedron argument*”

44. [one seminar](#) for the Workgroup Sistemi Complessi at the Dipartimento di Scienze Matematiche del Politecnico di Torino on 30 Novembre 2011. Title: “*A continuum model for the bio-mechanical interactions between living tissue and bio-resorbable graft after bone reconstructive surgery*”

2012

45. one seminar at Ecole Doctorale MEGA, INSA de Lyon, 25 January 2012. Title: “*Continuum models for microscopically heterogeneous materials: applications to concrete and porous media*”

46. one seminar of Physical Mathematics at Università Sapienza di Roma, 1 February 2012. Title: “*Strutture “micro” che producono comportamenti “macro” esotici: una introduzione ai continui generalizzati*”

47. [one seminar](#) über Fragen der Mechanik at EAM – Friedrich Alexander Universität, Erlangen, Nürnberg, 6 March 2012. Title: “*How contact interactions may depend on the shape of Cauchy cuts in N-th gradient continua: approach “à la D’Alembert”*“
48. [invited plenary lecturer](#) at the 38th SOLID MECHANICS CONFERENCE, Warsaw University, 27-31 AUGUST 2012, Warsaw
49. one seminar at Ecole Doctorale Sciences de la terre et des planètes solides (STP), INSA de Lyon, 18 October 2012. Title: “*N-th Gradient continua: general theory and microscopic structures. Perspectives in wave propagation*“

2013

50. one seminar at Laboratoire Modelisation et Simulation Multi Echelle (MSME UMR8208 CNRS), Université Paris Est (Marne-la-Vallée), France, 15 May 2013. Title : “*Continuous Models for describing the complexity of growth phenomena in bone tissues reconstructed with bio-resorbable materials : how to account for microstructures?*“
51. one seminar at laboratoire Imath, Université du Sud Toulon-Var, Toulon (France), 23 May 2013. Title : “*Continuous Models for describing the complexity of growth phenomena in bone tissues reconstructed with bio-resorbable materials : how to account for microstructures ?*“
52. [one seminar](#) at Politecnico di Milano, Beltrami Room, organized by Prof. Umberto Perego, Department of Civil and Environmental Engineering, 25 June, 2013. Title: “*Analytical Continuum Mechanics à la Hamilton-Piola: Least Action Principle For Second Gradient Continua and Capillary Fluids*“
53. [one seminar](#) at 4th Canadian Conference on Nonlinear Solid Mechanics (CanCNSM 2013), McGill University (Montréal, Quebec), Canada, 23 July 2013. Title: “*Large Deformations in Isotropic Second Gradient Solids: Some Numerical Simulations Describing the onset of Boundary Layers*“
54. Chairman of Mini-Symposium on “Nonlinear Elasticity” at 4th Canadian Conference on Nonlinear Solid Mechanics (CanCNSM 2013), McGill University (Montréal, Quebec), Canada, 23 July 2013
55. [one seminar](#) at 4th Canadian Conference on Nonlinear Solid Mechanics (CanCNSM 2013), McGill University (Montréal, Quebec), Canada, 24 July 2013. Title : “*How Contact Interactions May Depend on the Shape of Cauchy Cuts in n-th Gradient Continua: Approach “À La D’Alembert”*“
56. [one seminar](#) at 4th Canadian Conference on Nonlinear Solid Mechanics (CanCNSM 2013), McGill University (Montréal, Quebec), Canada, 25 July 2013. Title: “*Generalized Poynting Effects in Predeformed Prismatic Bars*“
57. [Presentation](#) of Professor Angelo Luongo, Plenary Lecture at 4th Canadian Conference on Nonlinear Solid Mechanics (CanCNSM 2013), McGill University (Montréal, Quebec), Canada, 25 July 2013. Title: “*On the Use of the Multiple Scales Method in Solving Difficult Bifurcation Problems*“
58. Chairman of Mini-Symposium on “One dimensional models of beams, cables and beam-like structures” at 4th Canadian Conference on Nonlinear Solid Mechanics (CanCNSM 2013), McGill University (Montréal, Quebec), Canada, 26 July 2013
59. [Invited Lecture](#) at SES Medal Symposium in honor of D.J. Steigmann, 50th Annual Technical Meeting and ASME-AMD Annual Summer Meeting, Brown University School of Engineering, (PROVIDENCE, RI) , USA, 29 July 2013. Title :”*Analytical Mechanics of Continua with Microstructure*“

60. [one seminar](#) at LEMTA Laboratoire d'Énergétique et de Mécanique Théorique et Appliquée, Université de Lorraine, Nancy (France), 14 November 2013. Title: "*Higher gradient and Micromorphic continua: some applications to composites and growing tissues*"

2014

61. one seminar at University Center in Ajdovscina, University of Nova Gorica, Slovenia, 28 February 2014. Title: "*Research perspectives in design and applications of metamaterials, smart materials and structures to engineering problems*"

62. [one seminar](#) at Warsaw University of Technology, Faculty of Production Engineering, Warsaw, 8 April 2014. Title: "*Design and modelling of metamaterials: challenges from engineering sciences*"

63. [a Keynote Presentation](#) at International Conference on Structural Nonlinear Dynamics and Diagnosis, 19-21 May, 2014, Agadir, Morocco. Title: "*Piezoelectromechanical Structures: a new concept for vibration control*"

64. [two seminars](#) at 17th U.S. National Congress on Theoretical and Applied Mechanics, Michigan State University, East Lansing, Michigan, June 15-20, 2014. Title1: "*Modelling fibrous composite reinforcements by second gradient theory: shear strain boundary layers and edge internal actions*". Title2: "*Remarks on the 2014 Levi-Civita award for excellence in theoretical mechanics*".

65. [one seminar](#) at Dipartimento di Ingegneria civile, chimica e ambientale (DICCA), Università degli studi di Genova, Genova 7 July 2014. Title: "*Verso la concezione e l'ottimizzazione di nuovi metamateriali: una sfida per le teorie meccaniche. Strutture Piezo-ElettroMeccaniche e Materiali di Secondo Gradiente*"

66. [one seminar](#) at IUTAM SYMPOSIUM 2014 Complexity of Nonlinear Waves, Tallinn, Estonia, 8-12 September, 2014. Title: "*Variational methods for modelling non-linear effects in waves propagation in generalized continua*"

67. [one seminar](#) at Ecole Centrale de Lyon, France, 4 December, 2014. Title: "*PiezoElectroMechanical (PEM) structures: the concept of distributed control of vibrations via piezoelectric transduction and analog electric waveguides*"

68. [one seminar](#) at Warsaw University of Technology, Faculty of Production Engineering, Warsaw, 27 October 2014. Title: "*Tissue growth and reconstruction with optimized meta materials. New concepts and models*"

69. [one seminar](#) at WOKSHOP on Numerical methods for partial integro-differential equations modelling mechanical systems with nonlocal constitutive laws, ISTITUTO PER LE APPLICAZIONI DEL CALCOLO "MAURO PICONE" – Sede di Napoli, Italia, December 12, 2014. Title: "*Mechanical and biological systems with nonlocal constitutive laws*"

2015

70. [PhD course](#) held at Warsaw University of Technology, Warsaw, 19-31 January 2015. Title: "*Generalized continuum models with application to smart Structures, composites and biomechanics*".

71. one seminar at INSA de Lyon, France, 17 February 2015. Title: “*The role of mathematical modeling in civil engineering and in particular in structural mechanics: why technological is impossible without scientific understanding.*”
72. [one seminar](#) at Laboratoire d’Énergétique et de Mécanique Théorique et Appliquée (LEMTA), Université de Lorraine, Nancy, France, 19 February 2015. Title: “*Variational peridynamics and higher gradient continuum mechanics. Some applications to composite reinforcements.*”
73. [one seminar](#) at MSME Biomécanique, Université Paris-Est, France, 3 March 2015. Title: “*Higher gradient and micromorphic continuum models: applications to microscopically highly inhomogeneous composites and growing tissues.*”
74. [one seminar](#) at Sciences et Techniques de L’Ingénieur STI, École Polytechnique Fédérale de Lausanne EPFL, Switzerland, 2 April 2015. Title: “*Microstructured n -th gradient continuum models including piezoelectric elements and electric circuits and some applications to acoustics.*”
75. [Minisymposia invited speaker](#) at INTERPORE, International Society for Porous Media, Padova University, Italy, 18-21 May 2015. Title: “*Models from Generalised continuum mechanics for porous media infused with mixtures of compressible fluids: theoretical methods and applications.*”
76. [one seminar](#) at Graduate School for Micro-Macro-Interactions in Structured Media and Particle Systems – GRK 1554, organized by OTTO VON GUERICKE UNIVERSITY MAGDEBURG, 8-12 June 2015, Berlin (German). Title: “*On Gradient Material.*”
77. [one seminar](#) at the International Summer School “Advanced Problems in Mechanics”, Peter the Great St. Petesburg Polytechnic University, 22-27 June 2015, St. Petersburg, Russia. Title: “*Microstructured n -th gradient continuum models and some applications.*”
78. [one seminar](#) at 53rd Meeting of the Society for Natural Philosophy, University of Calgary, Canada, 19-21 August 2015.

2016

79. [one seminar](#) at European-Latin-American Conference of Theoretical and Applied Mechanics (ELACTAM-2016), University of Havana, Cuba, 22-24 February 2016. [Invited letter](#)
80. [one seminar](#) at Mathematical Institute, University of Oxford, England, UK, 3 March 2016. Title: “*Non-linear continuum models for planar extensible beams and pantographic lattices of beams: Heuristic homogenization, experimental and numerical examples of equilibrium in large deformation.*” [Invited letter](#)
81. [one seminar](#) at School of Mathematics and Statistics, University of Glasgow, Scotland, UK, 23 March 2016. Title: “*Large deformations of planar extensible beams and pantographic lattices: heuristic homogenization, experimental and numerical examples of equilibrium.*”
82. [one seminar](#) at the International Summer School “Advanced Problems in Mechanics”, Peter the Great St. Petesburg Polytechnic University, 27 June-02 July 2016, St. Petersburg, Russia. [Invited letter](#)
83. Short course on Metamaterials at the Alghero Summer School of the CNRS International Associate Laboratory Coss&Vita on “Elastic Metamaterials: From Theory to Applications”, Facoltà di Architettura, Università di Sassari, 22 – 29 May 2016, Alghero, Italy.

84. [one Keynote lecture](#) at the International Conference EMERGING TRENDS IN APPLIED MATHEMATICS AND MECHANICS, ETAMM 2016, LAMPS, Université de Perpignan, May 30 – June 3, 2016, Perpignan, France. Title: “*Pantographic lattices as an example of higher gradient continua: Heuristic vs rigorous homogenisation, macroscopic vs microscopic models, experimental and numerical examples of equilibrium and motion*”.
85. [one seminar](#) at GDRI GEOMECH Multi-Physics and Multiscale Couplings in Geo-environmental Mechanics, Université de La Rochelle, 20-22 June, 2016, La Rochelle, France. Title: “*Lagrangian discrete models for compact granular bodies : a method for describing the onset of force chains?*”.
86. [one Keynote lecture](#) at the 11th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences, ICNPAA 2016, Université de La Rochelle, July 5 – July 8, 2016, La Rochelle, France. Title: “*Pantographic lattice based metamaterials: Modelling, prototype experiments and possible engineering applications*”.

International Conferences and Schools Organization

1. 13th International Symposium on “*Applied Electromagnetics and Mechanics (ISEM)*”, September 9-12, 2007 Kellog Center Michigan State University East Lansing, MI USA
2. Course CISM UDINE “*Variational Models and Methods in Solid and Fluid Mechanics*” Coordinators: Francesco dell’Isola (Rome, I), Sergey Gavrilyuk (Marseille, F) July 12-16 2010
3. [Scuola Estiva AIMETA](#) / Summer School of the Italian Association of Theoretical and Applied Mechanics in Sperlonga, 20-24 September 2010. “*Anomalous Transport: from Billiards to Nanosystems*” sponsored by Università di Roma La Sapienza CNR and Città di Sperlonga
4. [Symposium at International Research Center M&MoCS](#) on “*Mechanics of Fractures and Second Gradient Theory*”, Cisterna di Latina, July 4-8 2011
5. [First Sperlonga Summer School](#) on Mechanics and Engineering Sciences, Sperlonga (Italy), 26-30 September 2011. “*Atomistic and continuum descriptions of microstructures*”
6. [Workshop at International Research Center M&MoCS](#) on “*Second Gradient and Generalized Continua*”. Coordinators: Francesco dell’Isola (Sapienza Università di Roma), Samuel Forest (Paris, F). Cisterna di Latina, March 12-16, 2012
7. [Second Sperlonga Summer School](#) on Mechanics and Engineering Sciences, Sperlonga (Italy), 24-28 September 2012. “*Mechanics and Thermodynamics of Soft Active Matter*”
8. [Member of International Scientific Committee](#) at 4th Canadian Conference on Nonlinear Solid Mechanics (CanCNSM 2013), McGill University (Montréal, Quebec), Canada, 23-26 July 2013.
9. [Member of Organizing Committee](#) at 4th Canadian Conference on Nonlinear Solid Mechanics (CanCNSM 2013), McGill University (Montréal, Quebec), Canada, 23-26 July 2013.
10. [Organizer of Minisymposium](#) “*Nonlinear Elasticity*” (Dedicated to Richard Toupin, in recognition of his outstanding contribution to Mechanics) at 4th Canadian Conference on Nonlinear Solid Mechanics (CanCNSM 2013), McGill University (Montréal, Quebec), Canada, 23-26 July 2013.

11. [Third Sperlonga Summer School](#) on Mechanics and Engineering Sciences, Sperlonga (Italy), 23-27 September 2013. “*Dynamics, Stability and Control of Flexible Structures*”
12. [Organizer of Euromech-Colloquium 563](#) “*Generalized Continua and their Application to the Design of Composites and Metamaterials*”, Cisterna di Latina (LT), (Italy), 17-21 March 2014.
13. [Member of Scientific Committee](#) at 4th International Conference on Material Modeling, University of California, Berkeley, May 27-29, 2015
14. [Member of Scientific Committee](#) at the International Conference EMERGING TRENDS IN APPLIED MATHEMATICS AND MECHANICS.
15. [Organizer of Workgroup](#) on “*From adaptive and architecture materials to integrated smart structures: a challenge in mechanical engineering and biomechanical applications*”. Arpino (FR), (Italy), 16-18 April 2015.
16. [Organizer of Bilateral French-Italy Workshop](#) on “*Going down to the microscale in multiphysics problems from seismic driven risks to petroleum geomechanics*”. Arpino (FR), (Italy), 4-6 May 2015.
17. [Organizer of Inaugural Summer School](#) of the CNRS International Associate Laboratory Coss&Vita on Mechanics of generalized continua and their applications to engineering materials and structures, Arpino (FR), (Italy), 20-26 July 2015
18. [Organizer of the Workshop](#) on Computational Mechanics of Generalized Continua and Applications to Materials with Microstructure of the CNRS International Associate Laboratory Coss&Vita, Scuola Superiore di Catania, 29 – 31 October, 2015, Catania.

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