

Curriculum Vitae di Pierangelo Masarati (in Italian; English version follows)

Aggiornato al 27 maggio 2018

Nato a Stradella (PV) il 30/09/1969

- Professore Ordinario dal 2016 presso il Dipartimento di Scienze e Tecnologie Aerospaziali, Politecnico di Milano
- Abilitazione Scientifica Nazionale a Professore di Ia Fascia 09/A1 2012 (dal 3 febbraio 2014)
- Professore Associato dal 2011 presso il Dipartimento di Ingegneria Aerospaziale del Politecnico di Milano
- Idoneità a Professore Associato in ING-IND/04 nel 2010
- Ricercatore dal 2001 presso il Dipartimento di Ingegneria Aerospaziale del Politecnico di Milano
- Dottore di Ricerca in Ingegneria Aerospaziale nel 2000 presso il Politecnico di Milano
- Laureato in Ingegneria Aeronautica nel 1996 presso il Politecnico di Milano

- personal page: <<https://home.aero.polimi.it/masarati/>>
- ORCID: <<http://orcid.org/0000-0002-9347-7654>>
- Scopus: <<http://www.scopus.com/authid/detail.url?authorId=6603564194>>
- ResearcherID: <<http://www.researcherid.com/rid/I-3898-2012>>
- Google Scholar: <<http://scholar.google.it/citations?user=MQSSUAWAAAAJ>>
- Publons: <<https://publons.com/author/479745/>>

Didattica:

- titolare del corso di Dynamics and Control of Flexible Aircraft (1° anno, 2° semestre Laurea Magistrale) dall'A.A. 2016-2017
- titolare del corso di Dinamica e Controllo di Strutture e Fondamenti di Aeroelasticità (1° anno, 2° semestre Laurea Magistrale) dall'A.A. 2011-2012 all'A.A. 2015-2016
- titolare del corso di Dinamica dei Sistemi Aerospaziali (3° anno, 1° semestre; inizialmente 2° anno, 2° semestre) dall'A.A. 2003-2004
- coordinamento del corso di “Dinamica dei Sistemi Multibody” per la Scuola di Dottorato in “Aeromobili a Decollo Verticale”, “Ingegneria Aerospaziale” e “Ingegneria dei Sistemi Meccanici”, in collaborazione con il Professor Federico Cheli dall'A.A. 2001
- supporto al corso di “Aeroservoelasticità dei Velivoli ad Ala Rotante” per la scuola di dottorato in “Aeromobili a Decollo Verticale” (nel 2008 in collaborazione con il Professor Roberto Celi, University of Maryland, negli anni successivi in collaborazione con il Professor Marco Borri) dall'A.A. 2007-2013
- seminari didattici per il “Postgraduate Course in Rotary Wing Technologies”, Politecnico di Milano dal 2010
- supporto al corso di Progetto di Elicotteri (2° anno, 1° semestre LS) nell'A.A. 2008-2009
- supporto ai corsi di Aeroelasticità Applicata, Progettazione e Sperimentazione Aerospaziale, Dinamica dei Sistemi Aerospaziali in vari periodi a partire dal 1998

Compiti istituzionali:

- Coordinatore del Dottorato di Ricerca in Ingegneria Aerospaziale, Politecnico di Milano, dal 2018.
- Commissario della abilitazione scientifica nazionale ASN 2016 per il settore concorsuale 09/A1 (Ingegneria aeronautica, aerospaziale e navale), 2016-2018.
- Vice-coordinatore del Dottorato di Ricerca in Ingegneria Aerospaziale, Politecnico di Milano, dal 2014 al 2018.
- Coordinatore dei Rotorcraft Research Laboratories (RRL), Dipartimento di Scienze e Tecnologie Aerospaziali, Politecnico di Milano, dal novembre 2014.
- membro della commissione scientifica del Dipartimento di Scienze e Tecnologie Aerospaziali, Politecnico di Milano dal 2013 al 2016.
- membro del collegio dei docenti del Dottorato di Ricerca in Ingegneria Aerospaziale, Politecnico di Milano, dal 2006
- membro del collegio dei docenti del Dottorato di Ricerca in Aeromobili a Decollo Verticale, Politecnico di Milano, dal 2006 al 2012 (quando è confluito in quello di Ingegneria Aerospaziale)

Altro:

- Co-organizzatore del simposio “Efficient Methods and Real-Time Simulation” nella ASME IDETC 2018 14th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), Quebec City, Canada, 26-29 agosto 2018.

- Membro del comitato scientifico della XXIV Conferenza Internazionale AIDAA, Palermo-Enna, 18-22 settembre 2017.
- Co-organizzatore del 43° European Rotorcraft Forum, Milano, 12-15 settembre 2017.
- Co-organizzatore dei simposi “Fluid-Structure Interaction” e “Nonlinear Rotordynamics and Rotating Systems” nella ASME IDETC 2017 13th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), Cleveland, Ohio, USA, 6-9 agosto 2017.
- Membro di ASME Technical Committee on Multibody Systems and Nonlinear Dynamics dal 1 luglio 2017.
- Partecipazione a Google Summer of Code 2017 come amministratore di organizzazione e mentor.
- Associate Editor della rivista “The Aeronautical Journal” dal gennaio 2017.
- Perito del Giudice per le Indagini Preliminari (Tribunale di Vercelli) in procedimento penale relativo a incidente di volo a elicottero, novembre 2016 – maggio 2017.
- Membro dell'European Rotorcraft Forum International Committee dal settembre 2016
- Co-organizzatore della sessione su “Nonlinear Rotordynamics and Rotating Systems” nella ASME IDETC 2016 12th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), Charlotte, North Carolina, USA, 21-24 agosto 2016.
- Membro del Conference Working Group del congresso “Rotorcraft Virtual Engineering”, The University of Liverpool, UK, 8-10 novembre 2016.
- Partecipazione a Google Summer of Code 2016 come amministratore di organizzazione e mentor.
- Organizzatore della sessione su “Computational Methods in Multibody Systems” nella ASME IDETC 2015 11th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), Boston, MA, USA, 2-5 agosto 2015.
- Membro del comitato di valutazione del “Premio Innovazione AgustaWestland 2015”.
- Seminario a invito “Membrane Shape and Transverse Load Reconstruction Using Inverse FEM” presso 2015 Flow Interactions & Control Program Review, Air Force Office of Scientific Research (AFOSR), Arlington, VA, 21-23 luglio 2015.
- Organizzatore della sessione “Aerospace and Maritime Applications” per la conferenza ECCOMAS Multibody Dynamics 2015.
- Partecipazione a Google Summer of Code 2015 come amministratore di organizzazione e mentor.
- Seminario a invito “Flexible Body Simulation in MBDyn” presso MAGIC 2014, University of Wisconsin, Madison, 9 dicembre 2014.
- Coordinatore dei Rotorcraft Research Laboratories (RRL), Dipartimento di Scienze e Tecnologie Aerospaziali, Politecnico di Milano, dal novembre 2014.
- Seminario “Trajectory Stability Estimation Using Lyapunov Characteristic Exponents” presso l'University of Southampton, 4 settembre 2014.
- Organizzatore della sessione “Software Tools for Computational Dynamics in Industry and Academia” nella ASME IDETC 2014 10th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), Buffalo, NY, USA, 17-20 agosto 2014.
- Associate Editor della rivista “Journal of Aeroelasticity and Structural Dynamics”, <<https://www.asjournal.org/>>
- Guest editor del numero speciale “Application of Multibody Dynamics to Biomechanics” di “Part K, Journal of Multi-body Dynamics”, dicembre 2013.
- Membro della Commissione Scientifica del Dipartimento di Scienze e Tecnologie Aerospaziali dal gennaio 2013.
- Co-organizzatore della sessione “Software Tools for Computational Dynamics in Industry and Academia” nella ASME IDETC 2013 9th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), Portland, Oregon, USA, 4-7 agosto 2013.
- Membro del comitato scientifico e co-organizzatore della Invited Session “Aerospace Applications” nella conferenza Multibody Dynamics 2013, Zagreb, Croatia, 1-4 luglio 2013.
- Membro del comitato organizzativo della Pegasus Student Conference 2013, Milano, Italy, 3-5 aprile 2013
- Invited lecturer al workshop “Logiciels de simulation Open Source pour la conception automobile: exemples et perspectives”, Société des Ingénieurs de l'Automobile (SIA), Suresnes (Paris), France, 2 ottobre 2012.
- Visiting researcher presso University of Wyoming per ricerca inerente l'energia eolica, 16-27 agosto 2011.
- Seminario “Multibody Analysis of Flapping Wing Micro-Aerial Vehicles” presso lo Army Research Laboratory (ARL), Aberdeen Proving Ground (APG), Maryland, 15 agosto 2011.
- GARTEUR Award of Excellence per il 2010/2011 per l'attività nel GARTEUR HC AG-16 su Rotorcraft-Pilot Coupling (RPC)
- presidente di commissione di dottorato presso l'Università de la Coruña, 3 maggio 2010. Discussione della tesi di dottorato di Francisco Javier González Varela.

- Seminario “Multibody Dynamics: Introduction and Aeroservoelastic Applications” presso il Wind Energy Research Center del College of Engineering and Applied Science, University of Wyoming, 29 aprile 2010.
- Corso "Multibody Dynamics for Wind Turbines", REpower Systems AG, Büdelsdorf, Germania, 22-26 febbraio 2010.
- Invited Lecturer presso il Cymer Center for Control Systems and Dynamics, University of California San Diego, su “Overview of Multibody System Dynamics”, 4 settembre 2009.
- Minicorso su “Multibody Dynamics” presso Hutchinson CdR, 6-8 luglio 2009.
- Membro del comitato organizzatore del XX congresso nazionale AIDAA, 29 giugno-3 luglio 2009, Milano.
- Membro dell'Editorial Board di “Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multibody Dynamics” (JMBD) dal 2009
- Lecturer presso Alfred Gessow Rotorcraft Center dell'University of Maryland su Multibody Dynamics, 12-16 gennaio 2009
- Coordinatore nazionale PRIN 2007 “Modellazione dell'interazione biomeccanica uomo-macchina nei veicoli”, in cooperazione con le Università “La Sapienza”, “Tor Vergata” e “Roma Tre”.
- visiting researcher presso LaMSID (EDF R&D - French CNRS Joint Laboratory), 24 luglio - 7 agosto 2008.
- invited Lecturer al Seminario “Real-Time Multibody Simulation” presso l'Universidad Pública de Navarra, Dipartimento di Ingegneria Meccanica, 5-7 maggio 2008.
- invited lecturer al “Séminaire Simulation Numérique”, Hutchinson, 28 giugno 2007: “MBDyn, a Free Multibody Dynamics Solver”.
- Membro del comitato organizzatore e co-editor di “Multibody Dynamics 2007”, Milano, 25-28 giugno 2007.

Revisore per (tra le altre):

- Advances in Mechanical Engineering (AME)
- Aeronautical Journal (AJ)
- Aerospace Science and Technology (AESCTE)
- Aerotecnica Missili e Spazio (AEROT)
- AIAA Journal (AIAA-J)
- Aircraft Engineering and Aerospace Technology (AEAT)
- Archive of Mechanical Engineering (AME)
- Automation in Construction (AUTCON)
- Dynamics of Continuous, Discrete and Impulsive Systems (DCDIS)
- Engineering Review (ER)
- International Journal for Numerical Methods in Engineering (NME)
- International Journal of Automation and Control (IJAAC)
- International Journal of Solids and Structures (IJSS)
- International Journal on Mechatronics (IJM)
- Journal of Aeroelasticity and Structural Dynamics (ASDJ)
- Journal of Aerospace Engineering (ASENG)
- Journal of Aerospace Engineering (JAE)
- Journal of Applied Mathematics (JAM)
- Journal of Applied Mechanics (ASME-JAM)
- Journal of Computational and Nonlinear Dynamics (ASME-CND)
- Journal of Fluids and Structures (YJFLS)
- Journal of Intelligent Material Systems and Structures (JoIMS&S)
- Journal of Mechanical Design (ASME-MD)
- Journal of Multi-body Dynamics (JMBD)
- Journal of Spacecraft and Rockets (AIAA-JSR)
- Journal of the American Helicopter Society (JAHS)
- Journal of the Brazilian Society of Mechanical Sciences and Engineering (BMSE)
- Journal of Vibration and Acoustics (ASME-VIB)
- Mathematical and Computer Modelling of Dynamical Systems (MCMDS)
- Mechanical Sciences (MS)
- Mechanics of Advanced Materials and Structures (MAMS)
- Mechanism and Machine Theory (MECHMT)
- Multibody System Dynamics (MUBO)

- Multidiscipline Modeling in Materials and Structures (MMMS)
- Nonlinear Dynamics (NODY)
- Structural Engineering and Mechanics, An International Journal (SEM)

Esperienze Professionali:

- Marzo-settembre 2010: visiting assistant professor presso la School of Energy Resources della University of Wyoming
- dal 2001 al 2015: membro del core-team di sviluppo OpenLDAP
- Giugno-luglio 1999: visiting researcher presso l'Army Research Laboratory (ARL) di NASA Langley, Virginia
- Aprile-agosto 1998: visiting researcher presso l'Army Research Laboratory (ARL) di NASA Langley, Virginia

Ricerca:

- sviluppo di algoritmi e metodi per lo studio della dinamica di sistemi multicorpo e multidisciplinari, inclusi aspetti legati alla deformabilità, al controllo, alla stabilità, alla modellazione di forze di interazione, alla simulazione in tempo reale
- studio della dinamica e dell'aeroservoelasticità con particolare attenzione ai velivoli ed alle macchine ad ala rotante
- dinamica e controllo attivo delle vibrazioni, sia mediante tecniche classiche sia con materiali intelligenti
- Partecipazione a numerosi progetti di ricerca nazionali ed internazionali in collaborazione con industrie e centri di ricerca, tra i quali:
 - NITROS - Network for innovative training on rotorcraft safety (Marie Skłodowska-Curie Action Joint European Doctorate on rotorcraft safety, 2016-2020)
 - CROP (Cycloidal Rotor Optimized for Propulsion, responsabile unità di ricerca, FP7, 2013-2014)
 - “Real-time wing-vortex and pressure distribution estimation on wings via displacement and strains in unsteady and transitional flight conditions” (USAF/EOARD, 2012-2016, responsabile unità di ricerca, coordinatore)
 - GARTEUR HC EG-31 (conceptual design of helicopters, 2012-2013, responsabile unità di ricerca, coordinatore)
 - Progetto di rilevanza nazionale “Aeroelastic Analysis of Wind-Turbines by Coupled Computational Fluid Dynamics/Multibody System Dynamics”, Ministero degli Affari Esteri, 2011 (responsabile unità di ricerca , coordinatore).
 - ARISTOTEL (rotorcraft-pilot coupling, responsabile unità di ricerca, FP7, 2010-2013)
 - MAST/CTA (Micro-aerial vehicles, responsabile unità di ricerca, con University of Maryland, since 2009)
 - PRIN 2007 (interazione uomo-macchina, coordinatore nazionale, 2008-2010)
 - NICETRIP (aeroelasticità di convertiplani, FP6, 2006-2011)
 - GARTEUR HC AG-16 (rotorcraft-pilot coupling, coordinatore unità di ricerca, 2005-2008)
 - FRIENDCOPTER (controllo attivo di pale di elicottero, FP6, 2003-2008)
 - ADYN (whirl flutter di convertiplani, FP6, 2002-2006)
 - collaborazioni con REpower System AG (aeroelasticità di generatori eolici)
 - collaborazioni con Leonardo Helicopter Division (già AgustaWestland, già Agusta; dinamica e aeroservoelasticità di elicotteri e convertiplani)
 - collaborazione con NASA Langley e Army Research Laboratory (aeroelasticità di convertiplani)
 - collaborazioni con Hutchinson CRC (dinamica di sistemi multicorpo)
 - collaborazioni con SysNet (sviluppo di sistemi di informazione e comunicazione distribuita)

Pierangelo Masarati's Curriculum Vitae (*versione in inglese; versione italiana all'inizio*)

Last update May 27, 2018

Born in Stradella (PV) on September 30th, 1969

- Full Professor since 2016 at the Department of Aerospace Science and Technology of Politecnico di Milano
- Associate Professor since 2011 at the Department of Aerospace Engineering of Politecnico di Milano
- “Ricercatore” (Assistant Professor) since 2001 at the Department of Aerospace Engineering of Politecnico di Milano
- “Dottore di Ricerca” (Ph.D.) in “Ingegneria Aerospaziale” (Aerospace Engineering) in 2000 from Politecnico di Milano
- “Laurea” degree in “Ingegneria Aeronautica” (Aeronautical Engineering) in 1996 from Politecnico di Milano

- personal page: <<https://home.aero.polimi.it/masarati/>>
- ORCID: <<http://orcid.org/0000-0002-9347-7654>>
- Scopus: <<http://www.scopus.com/authid/detail.url?authorId=6603564194>>
- ResearcherID: <<http://www.researcherid.com/rid/I-3898-2012>>
- Google Scholar: <<http://scholar.google.it/citations?user=MQSSUAWAAAAJ>>
- Publons: <<https://publons.com/author/479745/>>

Teaching activity:

- teaching the “Dynamics and Control of Flexible Aircraft” class (1st year, 2nd semester MS degree) since 2016
- teaching the “Dynamics, Control of Structures and Fundamentals of Aeroelasticity” class (1st year, 2nd semester MS degree) from 2011 to 2016
- teaching the “Dynamics of Aerospace Systems” class (3rd year, 1st semester; was 2nd year, 2nd semester) since 2003
- coordinating the class of “Multibody Systems Dynamics” for the Ph.D. Schools of “Aerospace Engineering”, “Mechanical Systems Engineering”, and “Rotary Wing Aircraft”, in collaboration with Professor Federico Cheli since 2001
- lecturing for the “Postgraduate Course in Rotary Wing Technologies”, Politecnico di Milano, since 2010
- supporting the class of “Aeroservoelasticity of Rotary Wing Aircraft” for the Ph.D. school of “Rotary Wing Aircraft” (in 2008 in collaboration with Professor Roberto Celi, University of Maryland, later with Professor Marco Borri) from 2008 to 2012
- assisting the class of Rotorcraft Design in 2008
- assisting the classes of “Applied Aeroelasticity”, “Aerospace Design and Testing”, “Dynamics of Aerospace Systems” over many years

- Coordinator of the Ph.D. program in Aerospace Engineering of Politecnico di Milano since 2018.
- Committee member of “Abilitazione Scientifica Nazionale” (National Scientific Qualification) 2016 for sector 09/A1 (Aeronautical and aerospace engineering and naval architecture), 2016-2018.
- Vice-coordinator of the Ph.D. program in Aerospace Engineering of Politecnico di Milano, 2014-2018.
- Coordinator of the Rotorcraft Research Laboratories (RRL), Aerospace Science and Technology Department, Politecnico di Milano, since November 2014.
- member of the scientific committee of the Department of Aerospace Science and Technology, Politecnico di Milano 2013-2016.
- member of the committee of the Ph.D. program in Aerospace Engineering of Politecnico di Milano since 2006.
- member of the committee of the Ph.D. program in Rotary Wing Aircraft of Politecnico di Milano from 2006 to 2012 (when it was merged with Aerospace Engineering).

Other:

- Co-organizer of the symposium “Efficient Methods and Real-Time Simulation” in ASME IDETC 2018 14th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), Quebec City, Canada, August 26-29, 2018.
- Member of the scientific committee of the XXIV AIDAA International Conference, Palermo-Enna, September 18-22, 2017.

- Co-organizer of 43rd European Rotorcraft Forum, Milano, September 12-15, 2017.
- Co-organizer of symposia “Fluid-Structure Interaction” and “Nonlinear Rotordynamics and Rotating Systems” in ASME IDETC 2017 13th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), Cleveland, Ohio, USA, August 6-9, 2017.
- Member of ASME Technical Committee on Multibody Systems and Nonlinear Dynamics starting July 1st, 2017
- Participation in Google Summer of Code 2017 as organization administrator and mentor.
- Associate Editor of “The Aeronautical Journal” since January 2017.
- Judge's expert (Court of Vercelli) in trial related to helicopter flight accident, November 2016 - May 2017
- Member of the European Rotorcraft Forum International Committee since September 2016
- Co-organizer of session “Nonlinear Rotordynamics and Rotating Systems” in ASME IDETC 2016 12th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), Charlotte, North Carolina, USA, August 21-24, 2016.
- Member of Conference Working Group of “Rotorcraft Virtual Engineering”, The University of Liverpool, UK, November 8-10, 2016.
- Participation in Google Summer of Code 2016 as organization administrator and mentor.
- Co-organizer of session “Computational Methods in Multibody Systems” in ASME IDETC 2015 11th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), Boston, MA, USA, August 2-5 2015.
- Member of the “AgustaWestland Innovation Award 2015” evaluation committee.
- Invited seminar “Membrane Shape and Transverse Load Reconstruction Using Inverse FEM” at 2015 Flow Interactions & Control Program Review, Air Force Office of Scientific Research (AFOSR), Arlington, VA, July 21-23, 2015.
- Organizer of session “Aerospace and Maritime Applications” in ECCOMAS Multibody Dynamics 2015.
- Participation in Google Summer of Code 2015 as organization administrator and mentor.
- Invited seminar “Flexible Body Simulation in MBDyn” at MAGIC 2014, University of Wisconsin, Madison, December 9, 2014.
- Coordinator of the Rotorcraft Research Laboratories (RRL), Aerospace Science and Technology Department, Politecnico di Milano, since November 2014.
- Seminar “Trajectory Stability Estimation Using Lyapunov Characteristic Exponents” at University of Southampton, September 4, 2014.
- Organizer of session “Software Tools for Computational Dynamics in Industry and Academia” in ASME IDETC 2014 10th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), Buffalo, NY, USA, August 17-20, 2014.
- Associate Editor of “Journal of Aeroelasticity and Structural Dynamics”, <<https://www.asdjournal.org/>>
- Guest editor of the special issue “Application of Multibody Dynamics to Biomechanics” of “Part K, Journal of Multi-body Dynamics”
- Member of the Scientific Committee of the Department of Aerospace Science and Technology since January 2013.
- Co-organizer of session “Software Tools for Computational Dynamics in Industry and Academia” in ASME IDETC 2013 9th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC), Portland, Oregon, USA, August 4-7, 2013.
- Member of Scientific Committee and co-organizer of Invited Session “Aerospace Applications” in Multibody Dynamics 2013, Zagreb, Croatia, July 1-4, 2013.
- Pegasus Student Conference 2013, Milano, Italy, April 3-5, 2013 (member of the Organizing Committee)
- Invited lecturer at the workshop “Logiciels de simulation Open Source pour la conception automobile: exemples et perspectives”, Société des Ingénieurs de l'Automobile (SIA), Suresnes (Paris), France, October 2, 2012.
- Visiting University of Wyoming for wind energy related research, August 16-27, 2011.
- Seminar “Multibody Analysis of Flapping Wing Micro-Aerial Vehicles” at the Army Research Laboratory (ARL), Aberdeen Proving Ground (APG), Maryland, August 15, 2011.
- GARTEUR Award of Excellence for 2010/2011 for the activity in GARTEUR HC AG-16 on Rotorcraft-Pilot Coupling (RPC)
- doctoral committee president at Universidade da Coruña, May 3, 2010. Thesis title: “Efficient Implementations and Co-Simulation Techniques in Multibody System Dynamics”, Author: Francisco Javier González Varela.
- Seminar “Multibody Dynamics: Introduction and Aeroservoelastic Applications” at the Wind Energy Research Center of the College of Engineering and Applied Science, University of Wyoming, April 29, 2010.
- Seminar “Multibody Dynamics for Wind Turbines”, REpower Systems AG, Büdelsdorf, Germany, February 22-26 2010.

- Invited Lecturer at Cymer Center for Control Systems and Dynamics, University of California San Diego, on “Overview of Multibody System Dynamics”, September 4, 2009.
- Short course on “Multibody Dynamics” at Hutchinson CdR, July 6-8, 2009.
- Member of the organizing committee of the XX AIDAA conference, June 29-July 3 2009, Milano
- Member of the Editorial Board of “Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics” (JMBD) since 2009
- Lecturer at the Alfred Gessow Rotorcraft Center of the University of Maryland on Multibody Dynamics, Jan 12-16, 2009
- Coordinator of national research project PRIN 2007 “Modeling of biomechanical man-machine interaction in vehicles”, in cooperation with “La Sapienza”, “Tor Vergata” and “Roma Tre” Universities.
- visiting researcher at LaMSID (EDF R&D - French CNRS Joint Laboratory), July 24 - August 7, 2008.
- invited Lecturer at the Seminar “Real-Time Multibody Simulation” at Universidad Pública de Navarra, Mechanical Engineering Department, May 5-7, 2008.
- invited lecturer at “Séminaire Simulation Numérique”, Hutchinson, June 29 2007: “MBDyn, a Free Multibody Dynamics Solver”.
- Member of the organizing committee and co-editor of “Multibody Dynamics 2007”, Milano, Italy, June 25-28, 2007.

Reviewer for:

- Advances in Mechanical Engineering (AME)
- Aeronautical Journal (AJ)
- Aerospace Science and Technology (AESCTE)
- Aerotecnica Missili e Spazio (AEROT)
- AIAA Journal (AIAA-J)
- Aircraft Engineering and Aerospace Technology (AEAT)
- Archive of Mechanical Engineering (AME)
- Automation in Construction (AUTCON)
- Dynamics of Continuous, Discrete and Impulsive Systems (DCDIS)
- Engineering Review (ER)
- International Journal for Numerical Methods in Engineering (NME)
- International Journal of Automation and Control (IJAAC)
- International Journal of Solids and Structures (IJSS)
- International Journal on Mechatronics (IJM)
- Journal of Aeroelasticity and Structural Dynamics (ASDJ)
- Journal of Aerospace Engineering (ASENG)
- Journal of Aerospace Engineering (JAE)
- Journal of Applied Mathematics (JAM)
- Journal of Applied Mechanics (ASME-JAM)
- Journal of Computational and Nonlinear Dynamics (ASME-CND)
- Journal of Fluids and Structures (YJFLS)
- Journal of Intelligent Material Systems and Structures (JoIMS&S)
- Journal of Mechanical Design (ASME-MD)
- Journal of Multi-body Dynamics (JMBD)
- Journal of Spacecraft and Rockets (AIAA-JSR)
- Journal of the American Helicopter Society (JAHS)
- Journal of the Brazilian Society of Mechanical Sciences and Engineering (BMSE)
- Journal of Vibration and Acoustics (ASME-VIB)
- Mathematical and Computer Modelling of Dynamical Systems (MCMDS)
- Mechanical Sciences (MS)
- Mechanics of Advanced Materials and Structures (MAMS)
- Mechanism and Machine Theory (MECHMT)
- Multibody System Dynamics (MUBO)
- Multidiscipline Modeling in Materials and Structures (MMMS)
- Nonlinear Dynamics (NODY)
- Structural Engineering and Mechanics, An International Journal (SEM)

Professional Experiences:

- March-September 2010: visiting assistant professor at the School of Energy Resources of the University of Wyoming
- 2001-2015: member of the core development team of the OpenLDAP project
- June-July 1999: visiting researcher at the Army Research Laboratory (ARL) at NASA Langley, Virginia
- April-August 1998: visiting researcher at the Army Research Laboratory (ARL) at NASA Langley, Virginia

Research:

- development of algorithms and methods for the investigation of the dynamics of multibody/multidisciplinary systems, including aspects related to deformability, control, stability, interactional forces modeling, real-time simulation
- dynamics and aeroelasticity investigations, with specific reference to aircraft and rotorcraft
- dynamics and control of vibrations, by means of classical and smart materials based techniques
- Participation in a number of research projects, national and international, in cooperation with industries and research centers, including:
 - NITROS - Network for innovative training on rotorcraft safety (Marie Skłodowska-Curie Action Joint European Doctorate on rotorcraft safety, 2016-2020)
 - CROP (Cycloidal Rotor Optimized for Propulsion, PI, FP7, 2013-2014)
 - “Real-time wing-vortex and pressure distribution estimation on wings via displacement and strains in unsteady and transitional flight conditions” (USAF, 2012-2016, PI, coordinator)
 - GARTEUR HC EG-31 (conceptual design of helicopters, 2012-2013, coordinator)
 - National relevance project “Aeroelastic Analysis of Wind-Turbines by Coupled Computational Fluid Dynamics/Multibody System Dynamics”, Ministry of Foreign Affairs, 2011 (PI, coordinator).
 - ARISTOTEL (rotorcraft-pilot coupling, PI, FP7, 2010-2013)
 - MAST/CTA (Micro-aerial vehicles, PI, with University of Maryland, since 2009)
 - PRIN 2007 (man-machine interaction, PI, national coordinator, 2008-2010)
 - NICETRIP (aeroelasticity of tiltrotors, FP6, 2006-2011)
 - GARTEUR HC AG-16 (rotorcraft-pilot coupling, research unit coordinator, 2005-2008)
 - FRIENDCOPTER (active control of helicopter blades, FP6, 2003-2008)
 - ADYN (whirl flutter of tiltrotors, FP6, 2002-2006)
 - cooperation with REpower System AG (aeroelasticity of wind turbines)
 - cooperation with Leonardo Helicopter Division (formerly AgustaWestland, formerly Agusta; dynamics and aeroservoelasticity of helicopters and tiltrotors)
 - cooperation with NASA Langley and Army Research Laboratory (tiltrotor aeroelasticity)
 - cooperation with Hutchinson CRC (multibody system dynamics)
 - cooperation with Ericsson (development of distributed information systems)
 - cooperation with SysNet (development of distributed information systems)