

# Curriculum Vitae et Studiorum of **Costanzo Manes**

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Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica  
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## ***Personal data:***

Born in Rome on 24/12/1963, married with three children  
Known languages: English (very good), German (fair), French (basic), Russian (basic)

## ***Education***

- Master Degree in Electronic Engineering received on 11/12/1987 summa cum Laude from University of Rome "La Sapienza", with a final project on robotics entitled: "Hybrid Control of Position and Force" (advisor Prof. Fernando Nicolò).
- PhD in Systems Engineering (IV Cycle) received on 11/07/1992 from University of Rome "La Sapienza" with a thesis entitled: "Models of Robot-Environment Interaction and Hybrid Control of Position and Force" (advisor Prof. Fernando Nicolò). (Thesis partially published on the IEEE Trans. on Robotics and Automation, article [1B] in the list at the end of this document)
- Received the license to practice the profession of Engineer in 1988.

## ***Current position***

- From 01/09/2002 he is Associate Professor (SSD Ing-Inf/04 – Automatica) at University of L'Aquila, starting with the Department of Electrical and Information Engineering, and then with the Department of Information Engineering and Science, and Mathematics.

## ***Previous positions***

- From 08/04/1988 to 07/06/1989 he was lieutenant of the Corps of Technicians of the Italian Army at the "Army School of Technicians in Electronics" (STELE) in Rome with the position of Instructor of Electronic Equipment.;
- From 09/03/1992 to 21/06/1995 he held a technician position (VII level – graduate technician) at the Department of Electrical Engineering of University of L'Aquila.
- From 22/06/1995 to 31/08/2002 he has been Assistant Professor (in cluster K04X – Automatica) the Department of Electrical Engineering of University of L'Aquila.

## ***Teaching at University of L'Aquila***

- from 1992 to 1995, as a technician he pursued educational activity supporting the courses of "Systems Theory", "Identification Theory" and "Technologies of Control Systems" in the Master Degree programs in Electronic and Electric Engineering (assistance in trainings, exams, and projects)
- during Academic Years 1995-96, 1996-97 and 1998-99, within the course of "Technologies of Control Systems" held by Prof. A. Germani, he gave lectures on Industrial Robotics;
- from A.Y. 1995-96 to A.Y. 2002-03 he held the class of "Model Identification and Data Analysis", annual course (120 hours, 4<sup>th</sup> year course) compulsory for the Laurea Degree in Electronic Engineering;
- during AY. 2003-04 he held the class of "Model Identification and Data Analysis" (6 Credits, 60 hours, 2<sup>nd</sup> year) compulsory for the Master Program of Computer Engineering;

- from AY. 2002-03 to AY 2008-09 he held the class of "Industrial Robotics" (6 Credits, 60 hours, 3<sup>rd</sup> year), compulsory for the section Automatica of the Bachelor Program in Computer and Control Systems Engineering;
- since AY 2009-10 he holds the class of "Industrial Robotics" (9 Credits, 90 hours, 3<sup>rd</sup> year), compulsory for the section Automatica of the Bachelor Program in Information Engineering, Since AY 2015-16, 30 hours of the 90 hours (the part dealing with electrical motors and drives) are held by another teacher (Prof. Carlo Cecati);
- from AY 2004-05 to AY 2007-08 he held the class of "Systems Theory I", 6 Credits, 60 hours, 2nd year, compulsory for all Bachelor Programs in the field of Information Engineering (Electronics, Communications, Computer and Control Systems) at University of L'Aquila;
- since AY 2008-09 he holds the class of "Systems Theory", (9 Credits, 90 hours, 2nd year), compulsory for the Bachelor Program in Information Engineering. Since A.Y. 2019/20, 30 of the 90 lecture hours are given by another teacher (Dr. Vittorio De Iuliis);
- starting from AY 1998-99 he has been advisor of **268** final projects (Bachelor and Master Theses). The list of all thesis is reported at the end of the document called "Elenco delle attività didattiche".

#### ***Other teaching activities at the University***

- during AY 2001-02 he held the class of "State Estimation" (20 hours) for the Master in Space Systems, Services and Applications", organized by the School of Engineering of L'Aquila and Telespazio spa.
- during AY 2007-08, for the II level Master in Optimization Methods and Data Mining, he was a co-teacher of the classes of "Methods of process identification", "Signal Analysis and Filtering", and "Stochastic Learning Systems", where he gave 26 hours of lectures;

#### ***Further teaching activities***

- from July 1988 to July 1989, as a Reserve Officer he was "training officer of Electronic Equipments" at the School of Army Electronic Technicians ("Scuola Tecnici Elettronici dell'Esercito" - STELE) of Rome, and he taught to officers and sergeants technical students in electronics of the army the following classes: Electrotechnics, Electronics I and II, Servomechanisms, Digital Systems, Optical and Infrared equipments.
- during 1989 at the company FACE SUD Elettronica, Salerno, he held a one week course on: "Assembler Programming";
- during 1994 he held a course on "Probability" (28 hours) for the regional program "Purification Technicians" in L'Aquila, financed by CEE.

#### ***Supervisor of PhD students***

- Carlo Olivieri (XXIV Cycle of PhD in Electrical and Information Engineering)  
Title of the thesis: "Sensorless Control of Multiphase and Fault-Tolerant Permanent Magnet Synchronous Motor drives" (co-advisor Prof. Marco Tursini). Year of the title: 2013.
- Jorge Guerra Pires (XXIX PhD Cycle in Information and Communication Technology)  
Title of the thesis: "Mathematical modeling in energy homeostasis, appetite control and food intake with a special attention to ghrelin" (co-advisor Dr. Pasquale Palumbo). Year of the title: 2017. (Third place in the competition for n. 3 prizes for the best PhD theses in Biomedics given at Universities of Abruzzo in 2017 - - Fondazione Abruzzese per le Scienze della Vita ONLUS (FASVO))

- Vittorio De Iuliis (XXX PhD Cycle in Information and Communication Technology)  
Title of the thesis: “Internally Positive Representations and Stability Analysis of Linear Delay Systems”. Year of the title: 2018.
- Alessandro D'Ortenzio (3rd year of XXXIV PhD Cycle in Information and Communication Technology).

### *Supervised Post-Docs*

- Valentina Orsini (Post-Doc from September 2012 to August 2013, PRIN 2009 grant)  
Topic: “Models and methodologies for analysis and control of Microfluidic Systems”
- Vittorio De Iuliis (from January 2018 to December 2018), INCIPIT project grant,  
Topic: “Model identification for large-scale Cyber-Physical systems”

### *Supervisor of students of the Path of Excellence (PEP)*

- Fabio Marcella, (II edition of PEP, year 2015) of the II year of the Master Program in Computer and Control Engineering, with a thesis on “Autonomous Multi-Robot Coverage Control”

### *Management and service activities: institutional positions*

- Since 1994 he is the manager and supervisor of the Laboratory of Automatics and Robotics (LabAuRo) of the Department of Information Engineering, Computer Science, and Mathematics of UnivaQ (before 2010 the Lab was pertinence of the Department of Electrical and Information Engineering).
- PhD: from year 2000 (XVI Cycle) to 2011 (XXVII Cycle) he has been member of Advisory Board of the Ph.D. School in Electrical and Information Engineering, and until 2008 he served as secretary. From 2012 (XXVIII Cycle) to 2013 (XXIX Cycle) and then from 2015 (XXXI Cycle) until today has been member of the Advisory Board of the Ph.D. School in Information and Communication Technology.
- From May 2003 to all 2004 he has been elected member of the Technical-Scientific Committee of the Interdepartmental Center of Sport Science, as a representative of the Department of Electrical and Information Engineering.
- In 2007 he has been member of the Organizing Committee of the 2<sup>nd</sup> level Master in Optimization Methods and Data Mining, held in the AY 2007/08 (in cooperation with IASI-CNR)
- From October 2012 to October 2018 has been the **President** of the “Consiglio di Area Didattica” (CAD) of the Master Program in Computer and Control Systems Engineering: elected in October 2012 for the first three academic years (2012/13-2014/15), and afterwards he has been re-elected in October 2015 for the following three academic years (2015/16-2017/18).
- From February 2013 to October 2018 he has been the **President** of the “Gruppo di Riesame ed Assicurazione Qualità” of the Master Program in in Computer and Control Systems Engineering.
- From October 2018 he is a member of the “Gruppo di Riesame ed Assicurazione Qualità” of the Bachelor Programme in Information Engineering and of the Master Program in in Computer and Control Systems Engineering.
- Since October 2012 he has been member of the “commissione pratiche studenti” of the Master Program in in Computer and Control Systems Engineering.
- From A.Y. 2012/13 to 2014/15 he has been appointed member of the Educational Board of the Department DISIM (Commissione Didattica).
- From A.Y. 2012/13 to 2014/15 he has been appointed member of the “Commissione Paritetica Docenti Studenti” of the Department DISIM.

- In September 2018 he is again appointed member of the “Commissione Paritetica Docenti Studenti” of the Department DISIM, and in October 2019 he is the elected **President** of the commission.
- Since October 2018 he is the vicepresident of the “ Consiglio di Area Didattica” (CAD) of the Bachelor Programme in Information Engineering.
- Since 2013 he is the representative of the head of the Department DISIM at the meetings of COPI (Conferenza Per l’Ingegneria).
- In April of 2018 has been appointed representative of the University in the Supervising Committee of the framework agreement between University of L’Aquila and Italian Space Agency (ASI).
- On November 2019 he has been appointed member of the Governing Council of the new Center of Excellence Ex-Emerge, funded by CIPE.

### ***Management and service activities: committees and selection boards***

#### *Admission to PhD programmes*

- In 2000 he has been member of the Committee for the admission to the XV Cycle of the PhD program in Electrical and Information Engineering.
- In 2015 he has been member of the Committee for the admission to the XXXI Cycle of the PhD program in Information and Communication Technology.

#### *Final PhD examinations*

- PhD program in Computer Science and Automation, XXIV Cycle, year 2012, Univ. of Roma TRE;
- PhD program in Electronic, Automatic and Control of Complex Systems Engineering - XXV Cycle, year 2013, University of Catania;
- PhD program in Computer Science, Systems and Telecommunications - XXVII Cycle, year 2015, University of Firenze;
- PhD program in Systems Engineering - XXVII Cycle, University of Roma “La Sapienza” 2015;
- PhD program with double affiliation in Sciences et Technologies de l’Information et de la communication (STIC) - École Doctorale n. 580 / XXVIII Cycle, University of Roma La Sapienza and Université Paris-Saclay, year 2016;
- PhD program in Computer Science and Automation, XXIX Ciclo, year 2017, Univ. of Roma TRE;
- PhD program in Automatics, Bioengineering and Operation Research - XXX Cycle, year 2018 University of Roma “La Sapienza”;
- PhD program in Computer Science, Control and GeoInformation, XXIX Cycle, University of Roma Tor Vergata, year 2019.

#### *Recruiting Committees*

- in 2000 he is member of the Committee for the selection of assistant professor (K04X) at University of Roma “Tor Vergata”;
- in 2001 he is member of the Committee for the selection of assistant professor (K04X) at University of Cassino;
- in 2012 he is member of the Committee for the selection of a one-year Post-Doc for the INCIPIT project, at the Dept. DISIM at UnivAQ;
- in february 2018 he is member of the Committee for the selection of an assistant professor (ING-INF/04) of type A (RTD-A) at Università di Catania
- in October 2018 he is member of the Committee for the selection of an assistant professor (ING-INF/04) of type B (RTD-B) at Università di Catania

- in 2019 he is member of the Committee for the selection of an assistant professor (ING-INF/04) of the type A (RTD.A) at DISIM, UnivAQ, funded by a PON Ricerca e Innovazione 2014-2020 project;
- in 2019 he is member of two Committees for the selection of two on-year Post-Docs (ING-INF/03 and ING-INF/04) funded by the SAFE project, at DISIM, UnivAQ;
- in 2020 he is member of the Committee for the selection (“Procedura Valutativa”) of an associate professor (ING-INF/04) at the Dept. DIAG at University of Roma “La Sapienza”.

#### *Examinations for the license to the Engineering Profession*

- In the years 2009 and 2016 he has been auxiliary member (“membro aggregato”) for the Computer and Control Engineering in the Committee for the professional practice examination for the license to the Engineering Profession (esami di abilitazione).

#### **Reviewer of PhD theses**

- PhD thesis in Biomedical Engineering, XXV PhD Cycle, year 2013 (Università Campus Biomedico di Roma) entitled: “New Methodologies for the filtering and state estimation problems in bio-medical applications” (Dr. Valerio Cusimano);
- PhD thesis with double affiliation in Sciences et Technologies de l'Information et de la communication (STIC) - École Doctorale n. 580 / XXVIII Cycle, University of Roma “La Sapienza” and Université Paris-Saclay, year 2016, entitled: “Applications de l'automatique non linéaire échantillonnée à la robotique mobile” (Dott. Raffaello Bonghi)
- PhD thesis in Systems Engineering - XXXI PhD cycle, year 2018 (Univ. di Roma “La Sapienza”) entitled: “Distributed Estimation for Nonlinear Systems” (Dott. Matteo Mekhil).

#### **Research collaborations**

- from 1998 to 2007 he has been “incaricato di ricerca” at the Istituto di Analisi dei Sistemi ed Informatica “A. Ruberti” (IASI-CNR), in Rome. Since April 2010 he has been “Associato di Ricerca” at the same institution.

Collaborators at IASI: Dott. Pasquale Palumbo, Dott. Francesco Carravetta, Dott. Andrea De Gaetano, Dott.ssa Simona Panunzi, Dott. Alessandro Borri, Dott. Valerio Cusimano

- University of Tel Aviv (Israel): collaboration with Prof. Robert Liptser (1998-2002)
- University di Catania: collaboration with Proff. Salvatore Graziani, Maide Bucolo (since 2005)
- University Campus Biomedico of Roma: collaboration with Prof. Filippo Cacace (since 2009)
- University of Firenze: collaboration with Prof. Marco Sciandrone (dal 2004)
- University of Roma Tor Vergata: collaboration with Prof. Francesco Martinelli (since 2006)
- Centre de recherche Inria (Grenoble Rhône-Alpes): collaboration with Prof. Agostino Martinelli (since 2006)
- University of Roma “La Sapienza”: collaboration with Prof. Lorenzo Farina (since 2011)
- University of Milano “Bicocca”: collaboration with Proff. Lilia Alberghina and Marco Vanoni (since 2013)

#### **Honors and Awards**

- in 1991 he won the SIRI (Società Italiana Industrial Robotics) prize for the best oral presentation at the 5th Int. Conf. on Advanced Robotics (ICAR'91), held in Pisa, I. The title of the presentation: “On the Modeling of robots in contact with a dynamic environment”, A. De Luca, C. Manes.

- in 2016 he won the 1° prize SYSBIO 2016 for the article: "Whi5 phosphorylation embedded in the G1/S network dynamically controls critical cell size and cell fate", Nature Communications, ranked as the best publication of year 2106 according to the SYSBIO Centre for Systems Biology - [www.sysbio.it](http://www.sysbio.it). (coauthors: P. Palumbo, M. Vanoni, V. Cusimano, S. Busti, F. Marano, L. Alberghina.)
- in 2014 he got the “Abilitazione Scientifica Nazionale” as full Professor in the area 09/G1 – ING-INF/04, call 2012 (DD n. 222/2012) (duration from 31/01/2014 to 31/01/2023)

### ***Directions of Research Projects***

- In the years 2003-2005 he has been the local scientific manager of the research unit of the University of L’Aquila of the MIUR National Project entitled “Innovative bio-inspired strategies for the control of motion systems”, (MIUR grant PRIN 2003). The title of the research programme of the University of L’Aquila was “Investigation methodologies of hybrid systems for motion and remote control”. Total grant: 31.000,00 Euro, Prot. 2003090328\_003, 20/11/2003 - 20/11/2005
- In the years 2006-2007 he has been the local scientific manager of the research unit of the University of L’Aquila of the MIUR National Project entitled “SASCOM: Sensors, Actuators and Systems for Motion Control, based on IPMC (Ionic Polymer Metal Composite) materials” (MIUR grant PRIN 2005). The title of the research programme of the University of L’Aquila was “Modeling, Identification and Control of Systems based on interconnected IPMC”. Total Grant: 37.165,00 Euro, Prot. 2005097521\_003, 30/01/2006 - 30/01/2008
- In the years 2011-2012 he has been the local scientific manager of the research unit of the University of L’Aquila of the MIUR National Project entitled “Integrated Strategies of Innovative Control of Microfluidic Systems” (MIUR grant PRIN 2009). The title of the program of the research unit of L’Aquila was: “Innovative Methodologies for Modeling, Identification and Control of Microfluidic Systems”. Total Grant: 79.453,00 Euro, prot. 2009J7FWLX\_002, 17/10/2011 - 17/10/2013
- In 2014 he has been manager of Galileo project G13-53, financed by the Italo-Francese University (UIN), entitled: “Development of robust and efficient robot localization and mapping systems in the context of home automation”, in collaboration with INRIA Rhone Alpes.
- from 2001 to 2008 he has been scientific coordinator of the local research project financed by the University of L’Aquila entitled: “Filtering of nonlinear, singular and delayed systems”;
- from 2009 to 2014 he has been scientific coordinator of the local research project financed by the University of L’Aquila entitled: “Estimation and control of nonlinear systems”;
- from 2015 to 2017 he has been scientific coordinator of the local research project financed by the University of L’Aquila entitled: “Analysis, estimation and control of dynamic systems”.

### ***Partecipant to research projects***

Since 1989 he took part in many research programmes financed by MURST (now MIUR), CNR, ASI and EU:

- “Finalized project on Robotics” (CNR 1989-93), sub-project “Robot Control” (National Coordinator Prof. F. Nicolò), research unit of Rome "La Sapienza";
- “Model Identification, control systems and signal processing” (MURST, 1993-1994, National Coordinator Prof. S. Bittanti), research unit of L’Aquila;
- “Systems and Control Theory” (MURST, 1995-1997, National Coordinator Prof. S. Monaco), research unit of L’Aquila;
- project TEMPUS-TACIS for educational-scientific exchanges with the Kazakh National Technical University, Almaty (Kazakhstan), 1995-98, aimed at the revision of the Electronic Engineering programme at the “Kazakh National Technical University” (KNTU) in Almaty

(Kazakhstan). Within this project he looked after the creation of a Computer Lab and of a Robotic Lab at KNTU of Almaty.

- “Intelligent modular sub-systems for the space automation and robotics” (ASI, 1999-01, National Coordinator Prof. S. Monaco), research unit of L'Aquila;
- “Mobile Aero-Assisted Robotic System for Mars Exploration (MAARS)” (ASI 2000-03, National Coordinator Prof. S. Monaco), research unit of L'Aquila;
- European project HYBRIDGE (EU 2002-2005) (cod. FP5-IST-2001-32460), local coordinator Prof. M.D. Di Benedetto, research unit of L'Aquila;
- “Active control of mechanical structures”, financed by the University of L’Aquila (2002-03, Coord. Prof. A. Germani).
- “Eco-friendly design of smart furniture equipments with life-saving during seismic events, S.A.F.E.” (2018-2020, Cod. ARS01\_00914) MIUR/PON - Ricerca e Innovazione 2014/2020, Progetto di Ricerca Industriale e non preponderante Sviluppo Sperimentale – Area: “Design, Creativity and e Made in Italy”, local coordinator Prof. Massimo Fragiaco, UnivAQ.

### ***Organizer of scientific events***

- in 1998 he was a co-organizer of two special sessions (Time Delay Systems I e II) at the IEEE 6th Mediterranean Conference on Control and Systems, held in Alghero in June 1998 (together with Prof. A. Germani and Prof. P. Pepe)
- in 1999 he was in the Organizing Committee of the First Italy Kazakhstan Working Symposium on Modeling and Control of Nonlinear Deterministic and Stochastic Systems, Almaty (Kazakhstan),
- in 2000 he was a co-organizer of the special session on Nonlinear Delay Systems at the 2nd IFAC Workshop on Time Delay Systems, held in Ancona in September 2000 (together with Prof. A. Germani and Prof. P. Pepe)
- in 2006 he was Editor and co-organizer of the 6th IFAC Workshop on Time-Delay Systems (IFAC-TDS 2006), held in L’Aquila, July 2006.
- in 2016 he was member of the International Program Committee of the 5th International Symposium on Positive Systems, held in Roma, Italy, September 14th-16th 2016.

### ***Reviewer of scientific papers***

Costanzo Manes regularly serves as a reviewer of scientific papers submitted to journal and conferences in the field of control and systems (162 registered reviews on [publons.com](https://publons.com)). Some of the main journals of which he is reviewer are: IEEE Transactions on Automatic Control, Automatica, Systems & Control Letters, Int. Journal of Control, Int. Journal of Robust and Nonlinear Control, IEEE Transactions on Circuits and Systems I e II, IEEE Transactions on Systems, Man and Cybernetics, IEEE Transactions on Aerospace and Electronic Systems, IEEE Transactions on Control Systems Technology, IEEE Control Systems Letters, International Journal of Adaptive Control and Signal Processing, International Journal of Adaptive Control and Signal Processing, Asian Journal of Control, IEEE Transactions on Robotics, SIAM J. on Control & Optimization, Nonlinear Dynamics.

### ***Research Activity***

Costanzo Manes coauthored 7 book chapters (peer-reviewed), 45 journal articles (peer-reviewed) and 93 works on proceedings of international Conferences (the complete list is at the end of this document).

### ***Research topics:***

The main topics of the scientific activity of Costanzo Manes are:

- Robotics: modelling of robot-environment interaction in the execution of tasks that involve non-negligible exchange of forces. Definition of methodologies of simultaneous robot position and exerted force. Localization problems of mobile robots.
- State estimation in nonlinear dynamic systems in deterministic and stochastic frameworks (state observers and filters); application of polynomial estimation techniques for filtering of nonlinear systems; simultaneous state and parameters estimation; state estimation by means of Carleman approximation of nonlinear systems, both in continuous and discrete time, both in deterministic and stochastic conditions. Application to sensorless control of electrical motors.
- Analysis, estimation and control of delay systems: LQG control for stochastic linear systems with state delays, finite-dimensional approximation of the optimal controller, control with exact linearization for nonlinear delay systems, state observers for systems with delays in the state and in the measurements, control of systems with delayed measurements; cascade observers. Control via output feedback based on state observers for delay systems. Stabilization in the presence of delayed measurements, even in the presence of time-varying delays. Identification of linear feedback systems with delay in the feedback.
- State estimation of descriptor systems (singular), of unknown input systems, of hybrid systems with Markov switching;
- Deterministic and stochastic modelling and control of fisiological/biological systems. Control of glycemia by means of a state observer. Models of cell dynamics, in particular of temporization mechanisms within the cell.
- Stochastic bisimulations: definitions and stochastic bisimilarity conditions both in discrete and continuous time. Reduction procedures of systems by means of bisimilarity.
- Methods of Internal Positive Realization (IPR) of state-space systems and transfer matrices. Use of IPR for interval observers design and for the stability analysis of classes of linear delay systems (differential systems, difference continuous time systems, differential-difference systems).



## List of publications of Costanzo Manes - december 2020

(<http://people.disim.univaq.it/~costanzo.manes/Pubblicazioni.html>)

### **PhD thesis:**

Costanzo Manes, "Modelli di Interazione Robot-Ambiente e Controllo Ibrido di Posizione e Forza", Tesi di Dottorato di Ricerca in Ingegneria dei Sistemi (IV Ciclo), Università di Roma "La Sapienza", 1992.

### **Educational publication:**

M. Dalla Mora, A. Germani, C. Manes, "Introduzione alla teoria dell'identificazione dei sistemi," EUROMA-La Goliardica, Rome, October 1997.

### **A) Books and Book Chapters**

- [1A] A. De Luca, C. Manes, F. Nicolò, K.V. Plugachev, "Hybrid dynamic control of robot's arm" in Programming of applied systems, Cap. 5: Simulation and Design Methods, (in Russian), pp. 208-213, Nauka, Moscow 1992.
- [2A] A. Germani, C. Manes, P. Pepe, "Local asymptotic stability for nonlinear state feedback delay systems", in Theory and Practice of Control and Systems, A. Tornambé, G. Conte, A.M. Perdon (EDS), pp. 210-215, World Scientific, 1999. [ISBN: 978-981-4632-46-1 (ebook), DOI:[10.1142/9789814447317\\_0035](https://doi.org/10.1142/9789814447317_0035)]
- [3A] A. De Gaetano, D. Di Martino, A. Germani, C. Manes, "Mathematical models and state observation of the glucose-insulin homeostasis", in System Modeling and Optimization, Vol. 116, J. Cagnol and J.P. Zolesio Editors, pp. 281-294, Kluwer Academic Publishers, 2005. [ISBN: 978-140207760-9, ISBN10: 140207760-2] [DOI: [10.1007/0-387-23467-5\\_20](https://doi.org/10.1007/0-387-23467-5_20)]
- [4A] A. Germani, C. Manes, P. Pepe, "Observer-based stabilizing control for a class of nonlinear retarded systems", R. Sipahi, T. Vyhlidal, S.-I. Niculescu, P. Pepe, (EDS), Time Delay Systems Methods, Applications and New Trends, LNCIS, Springer, Vol. 423, pp. 331-342, 2012. [ISBN: 978-364225220-4, ISBN-10: 364225220-6, DOI: [10.1007/978-3-642-25221-1\\_25](https://doi.org/10.1007/978-3-642-25221-1_25)]
- [5A] F. Cacace, A. Germani, C. Manes, "State estimation and control of nonlinear systems with large and variable measurement delays," in Recent Results on Nonlinear Delay Control Systems (in Honor of Miroslav Krstic), M. Malisoff, P. Pepe, F. Mazenc, I. Karafyllis (EDS), Advances in Delays and Dynamics Series Vol. 4, pp. 95-112, Springer, New York, 2015 [ISBN: 978-3-319-18071-7, DOI: [10.1007/978-3-319-18071-7](https://doi.org/10.1007/978-3-319-18071-7)]
- [6A] F. Conte, V. De Luliis, C. Manes, "Internally Positive Representations and stability analysis of linear delay systems with multiple time-varying delays", in Positive Systems: Theory and Applications (POSTA 2016) Rome, Italy, September 14-16, 2016, F. Cacace, L. Farina, R. Setola, A. Germani (EDS), Lecture Notes in Control and Information Sciences (LNCIS) Vol. 471, pp 81-93, Springer Int. Pub, 2017. [ISBN: 978-3-319-54210-2 (Print), 978-3-319-54211-9 (Online), DOI: [10.1007/978-3-319-54211-9\\_7](https://doi.org/10.1007/978-3-319-54211-9_7)]
- [7A] V. De Luliis, A. Germani, C. Manes, "Stability analysis of linear delay systems via Internally Positive Representations: an overview", in Valmorbida, G., et al (Ed.): "Accounting for constraints in time-delay systems", Advances on Delays and Dynamics series, Springer, Heidelberg, Germany, (to appear on 2021).

### **Editor of Conference Proceedings**

C. Manes, P. Pepe, (EDS), Proceedings of the 6th IFAC Workshop on Time-Delay Systems, L'Aquila, Italy, July 10-11-12th, 2006, IFAC-PapersOnline (<http://www.ifac-papersonline.net>), Vol. 6, Part 1, posted online October 5th, 2007. [ISBN: 978-160560757-3, ISBN10: 160560757-6]

### **B) International Journals**

- [1B] A. De Luca, C. Manes, "Modeling of robots in contact with a dynamic environment", IEEE Transactions on Robotics and Automation, Vol. 10, No.4, pp. 542-548, August 1994 [IF 1994: 1.006]. [DOI:[10.1109/70.313104](https://doi.org/10.1109/70.313104)]
- [2B] M. Dalla Mora, A. Germani, C. Manes, "A state observer for nonlinear dynamical systems", Nonlinear Analysis, Theory, Methods and Applications, Vol. 30, No. 7, pp. 4485-4496, December 1997 [IF 1997: 0.280]. [DOI: [10.1016/S0362-546X\(97\)00184-3](https://doi.org/10.1016/S0362-546X(97)00184-3)]
- [3B] A. Germani, C. Manes, "State observers for nonlinear systems with smooth/bounded inputs", Kybernetika, Vol. 35, No. 4, pp. 393-413, 1999 [IF 1999: 0.1]. [Link: <http://www.kybernetika.cz/content/1999/4/393/paper.pdf>]
- [4B] A. Germani, C. Manes, P. Pepe, "Local asymptotic stability for nonlinear state feedback delay systems", Kybernetika, Vol. 36, No. 1, pp.31-42, 2000 [IF 2000: 0.178]. [Link: <http://www.kybernetika.cz/content/2000/1/31/paper.pdf>]

- [5B] M. Dalla Mora, A. Germani, C. Manes, "Design of state observers from a drift-observability property", IEEE Transactions on Automatic Control, Vol. 45, No. 6, pp. 1536-1540, August 2000 [IF 2000: 1.488].  
[DOI:[10.1109/9.871767](https://doi.org/10.1109/9.871767)]
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