

**Curriculum Vitae**  
***Maria Domenica Di Benedetto***

Maria Domenica Di Benedetto obtained her Master degree (summa cum laude) in Electrical Engineering and Computer Science, University of Roma La Sapienza in 1976. In 1981, she obtained the degree "Docteur-Ingénieur" and in 1987 the Doctorat d'Etat ès Sciences, Université Paris-Sud (Orsay, France). She was research engineer at IBM Scientific Centers in Paris and Rome (1979-1983), Assistant Professor at University of Roma "La Sapienza" (1983-1987), Associate Professor at Istituto Universitario Navale of Naples (1987-1990), Associate Professor at the University of Roma La Sapienza (1990-1993). Since 1994, she has been Professor of Control Theory at University of L'Aquila. From 1995 to 2002, she has been Adjunct Professor at University of California at Berkeley. She has been Visiting Scientist at MIT in 1987; Visiting Professor at the University of Michigan, Ann Arbor in 1988, 1989, 1992; Chercheur Associé, C.N.R.S., Poste Rouge, Ecole Nationale Supérieure de Mécanique, Nantes, France, in 1992. From 1990 to 1995 she has been McKay Professor at University of California Berkeley.

She was elected IEEE Fellow in 2002.

She was elected IFAC Fellow in 2019.

Since 2018, she is member of the Board of Governors of the IEEE-CSS.

She has been member of the IEEE Fellow Evaluation Committee of the Control Systems Society (CSS) (2013 - 2016), member of the IEEE Control Systems Technical Fields Award Committee (2007-2010), Chair of the Standing Committee on Fellow Nominations IEEE CSS (2003 to 2007).

She has been Associate Editor (1995 to 1999) and Associate Editor at Large (2006-2009) of IEEE Transactions of Automatic Control.

Since 1995 she is Subject Editor of the International Journal of Robust and Nonlinear Control.

Since 2015 she is member of the Editorial Board of the IFAC Journal Annual Reviews in Control and member of the Best Paper Award Committee for the same journal since 2019.

From 2016 to 2019, she is Associate Editor of IFAC Journal Nonlinear Analysis: Hybrid Systems.

Since 2020, she is Senior Editor of IFAC Journal Nonlinear Analysis: Hybrid Systems.

Since 2015, she is Member of the IFAC Conference on Analysis and Design of Hybrid Systems steering committee.

She has been appointed member of the IFAC Nichols Medal Selection Committee for the 2017-2020 triennium, and she is President of the Committee since 2020.

She has been selected as a Distinguished Lecturer for IEEE Control Systems Society for a three-year term beginning January 2020.

In 2001, she founded the Italian Center of Excellence for Research DEWS "Architectures and Design methodologies for Embedded controllers, Wireless interconnect and System-on-Chip", that she directed until 2019. The Center was formed after winning a competition countrywide. DEWS has a number of international collaborations with research centers and industry in Europe and the US.

Prof. Di Benedetto carries out research in the area of analysis and control of nonlinear and hybrid systems, and their application in the domains of energy, traffic control and biological systems. She has participated to research projects in collaboration with industry, in particular with Ford and Magneti-Marelli, in the area of automotive systems, with ABB in industrial engineering, with EUROCONTROL and NLR in air-traffic control.

She is co-founder and has been member of the Governing Board of WEST Aquila S.r.L until 2019. She has been a Member of Fondazione MIRROR since 2008, and vice-President from 2012 to 2015.

From 2010 to 2018, she has been a Member of the International Advisory Board of the Lund Center for the Control of Complex engineering systems

Since 2018, she is Member of the Scientific Board of Efficacy (France).

Since 2009, she is the President of the European Embedded Control Institute.

Since 2008, she is Member of the Scientific Committee of the Center of Excellence CETEMPS Univ. of L'Aquila.

From 2013 to 2019, she has been President of the Italian Society of researchers in Automatic Control (SIDRA).

### **PERSONAL DATA AND EDUCATION**

Master Degree: Laurea Ingegneria Elettronica, Università di Roma "La Sapienza", summa cum laude, 1976.

PhD "Docteur-Ingénieur", Université de Paris-Sud, Orsay (France), Conception et développement de systèmes informatiques de traitement de la parole pour l'aide aux malentendants, 1981.

PhD "Doctorat d'Etat ès Sciences", Université de Paris-Sud, Orsay (France), 1987, Poursuite de modèle et régulation de sortie des systèmes non linéaires, 1987.

### **PROFESSIONAL History**

- Full Professor Automatic Control, Università de L'Aquila, 1/11/94-present.
- Adjunct Professor, University of California, Berkeley, 1/7/95-1/7/02.
- Associate Professor, Automatic Control, Università di Roma "La Sapienza", 11/1/1990-1/11/94,
- Associate Professor, System Theory, Istituto Universitario Navale di Napoli, 7/27/1987 - 10/30/1990.
- Assistant Professor, Dipartimento di Informatica e Sistemistica, Università di Roma "La Sapienza", 10/1/1983 - 7/26/1987.
- Research Engineer, IBM Italia, Scientific Center, Roma, 4/13/1982 - 9/30/1983.
- Research Engineer, IBM France, Scientific Center, Paris, 7/2/1979 - 3/31/1982.
- Postdoctoral fellow, IBM France, Scientific Center, Paris, 3/1/1978 - 6/30/1979.
- CNR Research Fellow, Istituto di Automatica, Università di Roma "La Sapienza", 6/1/1977 - 1/31/1978.
- Stagiaire, IBM La Gaude Laboratory, Francia, Sept.-October 1975.

### **VISITING POSITIONS**

- Visiting Professor, Istituto Analisi dei Sistemi e Informatica IASI, CNR (Rome), and Invited Professor at CentraleSupélec (Paris, France), 01/03/2018 - 31/09/2019.
- Adjunct Professor, University of California, Berkeley, 1/7/95-1/7/02.
- Mc Kay Visiting Professor, University of California Berkeley, USA, Sept.-Oct.1997, Sept.-Oct.1995, Sept.-Oct.1994.
- Visiting Associate Professor, University of Michigan Ann Arbor, USA, October 1992, Sept. - Oct. 1989, Nov. 1988.
- Associate Research Engineer, University of California Berkeley, USA, April 1992.

- Mc Kay Visiting Lecturer, University of California Berkeley, USA, Sept. 1990.
- Chercheur Associé C.N.R.S. Poste Rouge, Ecole Nationale Supérieure de Mécanique, Nantes, France, July, October, November 1990.
- Visiting Scientist, Nonlinear Systems Laboratory, Massachusetts Institute of Technology, Cambridge, U.S.A., Sept. 1987 – November 1987.

## **SCIENTIFIC ROLES AND COORDINATION**

- President of Italian Association of Researchers in Automatic Control (SIDRA), Sept. 2013-Sept.2019.
- Director of the Italian Ministry of Scientific Research Center of Excellence for Research DEWS "Architecture and Design methodologies for Embedded controllers, Wireless interconnect and System-on-chip", Università dell'Aquila, August 2001-2019.
- Coordinator of the PhD Program in ICT and Member of the Research Committee, University of L'Aquila, 2011 - 2018.
- President of European Embedded Control Institute, January 2010-present.
- Scientific Manager and member of the Executive Committee of EECI, September 2007-2009.
- President of the Coordination Committee of the Italian Centers of Excellence founded by MIUR in 2001, (2010 - 2014).
- Member of the panel for the Italian National Program of research PNR 2021-2027.
- Member of the IFAC Nichols Medal Selection Committee for the 2017-2020 triennium.
- Member of the IEEE Fellow Evaluation Committee, IEEE CSS, 2012-2016.
- Member of the IEEE Control Systems Technical Fields Award Committee, IEEE CSS, 2007-2010.
- Chair of Standing Committee on Fellow Nominations, IEEE CSS, 2003-2007.
- Member of the Best Paper Award Committee, IEEE-CSS Italian Chapter, 2012, 2015.
- Member of the Best Paper Award Committee, IFAC Journal Annual Reviews in Control, 2019-present.
- Member of the International Advisory Board of Lund Center for Control of Complex engineering systems (Lund, Sweden), 2010-2018.
- Member of the Swedish Research Council: ICT-panel, Stockholm, Oct. 2012, Oct. 2014, Oct. 2018.
- Member of the Governing Board, of the Executive Committee and Work-Package Leader of "Information Society Technology" EC Network of Excellence: HyCON2, Sept. 2010-2014.
- Member of the Board of Representatives and of the Standing Committee, International Curriculum Option of Doctoral Studies in Hybrid Control for Complex, Distributed and Heterogeneous Systems (ICO), 2004-2008.
- Member of Standing Committee on Curriculum Regulations and of the Board of Representatives, ICO-NEH (International Curriculum Option of Doctoral studies in Networked, Embedded and Hybrid Control Systems), 2010-2017.
- Expert Member of the Hiring Committee for Associate and Full Professors, Dept Information Technology and Electrical Engineering, ETH, Zurich, 2013.
- Expert Member of the Hiring Committee for Researchers, KTH, Stockholm, Oct. 2014.
- Expert Member of the Committee for Promotion to Full Professor, KTH, Stockholm, April-Nov. 2015.
- Member of Advisory Group of FP7-ICT BALCON Boosting EU-Western Balkan Countries Research Collaboration in the Monitoring and Control area, 2011-2014.
- Member of the Board of Directors of MIRROR, 2008 - 2017, and Vice-President 2012-2016.
- Co-founder and member of the Governing Board of WEST Aquila, 2005 - 2019.

- Member of Scientific and Technical Committee of the Center of Excellence CETEMPS, August 2008 – present.

#### **RESEARCH PROJECTS since 2010**

- Principal Investigator, University of L'Aquila, EC SESAR JU WP-E Research Project MAREA (Mathematical Approach towards Resilience Engineering in ATM), March 2011-2013.
- Principal Investigator, University of L'Aquila, EC "TREN-DG" FP6 iFLY "Safety, Complexity and Responsibility based design and validation of highly automated Air Traffic Management", March 2007-June 2011.
- Principal Investigator, University of L'Aquila, Bilateral Research Agreement with University of California Berkeley, 2010-present.

#### **PRESENT EDITORIAL ACTIVITIES**

- Editor of IEEE Press Series on Control Systems Theory and Applications.
- Senior Editor of the IFAC Journal Nonlinear Analysis: Hybrid Systems.
- Member of the Editorial Board of IFAC Journal Annual Reviews in Control.
- Subject Editor of the International Journal of Robust and Nonlinear Control.

#### **PATENTS**

A. Scacchioli, G. Gaviani, M.D.Di Benedetto, S. Di Gennaro, Control Strategy for an Electromagnetic Actuator for Valves in Camless Engines (Metodo di controllo di un attuatore elettromagnetico di valvole per il comando di una valvola di un motore), B02005A000209, National Italian Patent, Bologna, Italy, April 1, 2005.