SHORT CURRRICULUM VITAE

Maria Domenica Di Benedetto is Professor of Automatic Control at University of L'Aquila (Italy). She obtained her Master degree (summa cum laude) in Electrical Engineering and Computer Science, University of Roma La Sapienza in 1976. She received her PhD degree in 1981 and the "Doctorat d'Etat ès Sciences" in 1987, both from Université de Paris-Sud (Orsay, France). She had been McKay Professor from 1990 to 1995 and Adjunct Professor from 1995 to 2002, at the Department of EECS of the University of California at Berkeley. She held visiting positions at MIT, the University of Michigan Ann Arbor, and Ecole Nationale Supérieure de Mécanique in Nantes (France).

She founded and had been the Director of the Italian Center of Excellence for Research DEWS "Architectures and Design methodologies for Embedded controllers, Wireless interconnect and System-on-Chip" at the University of L'Aquila, from 2001 to 2019. She had been a Member of the International Advisory Board for LCCC - Lund Center for Control of Complex engineering systems from 2010 to 2018. She had been the President of the Italian Association of Researchers in Automatic Control (SIDRA) from 2013 to 2019. She has been the President of the European Embedded Control Institute since 2009.

She is an IEEE Life Fellow and an IFAC Fellow. She is Vice-President Member Activities IEEE-CSS since January 2021. She is a Distinguished Lecturer of the IEEE-CSS. She had been a member of the IEEE Control Systems Technical Fields Award Committee, from 2007 to 2010.

She is Chair of the IFAC Nichols Medal Selection Committee and member of the IFAC Fellow Selection Committee for the 2020-2023 triennium.

She has been a member of the European Control Award Committee since 2021.

She is Editor of the IEEE Press Series on Control Systems Theory and Applications, Senior Editor of the IFAC Nonlinear Analysis: Hybrid Systems, and Member of the Editorial Board of the International Journal of Robust and Nonlinear Control.

She authored or co- authored more than 300 research papers in archival journals, book chapters, and international conference proceedings, in the areas of nonlinear and hybrid systems control theory, diagnosability and predictability in cyber-physical systems, and applications to automotive, smart grids and traffic control.

SOME RECENT PUBLICATIONS (2017-2021)

1. E. De Santis, M. D. Di Benedetto: Observability and Diagnosability of Finite State Systems: a Unifying Framework, Automatica, vol. 81, 2017, pp. 115–122. DOI: 10.1016/j.automatica.2017.02.042
2. G. Pola, E. De Santis, M.D. Di Benedetto, D. Pezzuti: Design of Decentralized Critical Observers for Networks of Finite State Machines: A Formal Method Approach, Automatica, 2017, 86, pp. 174–182. DOI: 10.1016/j.automatica.2017.08.025
3. G. Pola, P. Pepe, M. D. Di Benedetto: Decentralized Supervisory Control of Networks of Nonlinear Control Systems, IEEE Trans. on Automatic Control, vol. 63, n.9, Sept. 2018, pp.2803 - 2817. DOI: 10.1109/TAC.2017.2775962
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5. G. Pola, E. De Santis, M.D. Di Benedetto: Approximate Diagnosis of Metric Systems, Control Systems Letters, IEEE L - CSS, January 2018, 2(1), pp. 115-120. Electronic ISSN: 2475-1456, DOI: 10.1109/LCSYS.2017.2761300

6. E. De Santis, M.D. Di Benedetto, G. Fiore, G. Pola: Approximate Predictability of Pseudo-Metric Systems, Nonlinear Analysis: Hybrid Systems, vol. 36, May 2020.

7. M. Mirabilio, A. Iovine, E. De Santis, M.D. Di Benedetto, G. Pola: Scalable Mesh Stability of Nonlinear Interconnected Systems, IEEE Control Systems Letters, vol. 6, 2021, pp. 968-973.

8. T. Masciulli, G. Pola, E. De Santis, M.D. Di Benedetto: Output Feedback Reachability of Controlled-Observable States for Nondeterministic Finite-State Systems, IEEE Control Systems Letters, May 2021.

9. G. Pola, M.D. Di Benedetto: Control of Cyber–Physical–Systems with Logic Specifications: A Formal Methods Approach, Annual Reviews in Control, vol. 47, 2019, pp. 178-192.

10. Y. Zacchia Lun, A. D'Innocenzo, F. Smarra, I. Malavolta, M. D. Di Benedetto: State of the Art of Cyber-Physical Systems Security: an Automatic Control perspective, Journal of Systems and Software, vol. 149, March 2019, Pages 174-216. DOI:10.1016/j.jss.2018.12.006