

Procedura valutativa per la copertura di n. 1 posto di Professore Universitario di prima fascia per il settore concorsuale 09/G1 - Settore scientifico disciplinare ING-INF/04 presso il Dipartimento di Ingegneria Informatica, Automatica e Gestionale “Antonio Ruberti” - Facoltà di Ingegneria dell'Informazione, Informatica e Statistica - codice concorso 2021POR039

LUCA BENVENUTI Curriculum Vitae

Roma, 7 ottobre 2021

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Part I – General Information

Full Name	Luca Benvenuti
Date of Birth	
Place of Birth	
Citizenship	
Permanent Address	
Mobile Phone Number	
E-mail	
Spoken Languages	

Part II – Education

Type	Year	Institution	
University graduation	1992	Sapienza, University of Rome	Master degree (5 years) in Electronic Engineering (Laurea in Ingegneria Elettronica), 110 <i>summa cum laude</i>
PhD	1996	Sapienza, University of Rome	PhD in Systems Engineering (Dottorato di Ricerca in Ingegneria dei Sistemi)

Part III – Appointments

III A – Academic Appointments

Start	End	Institution	Position
01/11/1997	31/10/1999	Department of Electrical Engineering, University of L'Aquila	Post-doctoral research fellowship
05/09/2000	31/12/2004	Department of Computer, Control, and Management Engineering “Antonio Ruberti”, Sapienza, University of Rome	Assistant Professor (Ricercatore) ING-INF/04
01/01/2005	present	Department of Computer, Control, and Management Engineering “Antonio Ruberti”, Sapienza, University of Rome	Associate Professor ING-INF/04
07/10/2014	07/10/2023	Italian Ministry of Education, University and Research (MIUR)	Italian national scientific qualification as full professor (ASN 09/G1 – I Fascia)

III B – Other Appointments

Start	End	Institution	Position
15/11/1994	14/05/1995	Department of Electrical Engineering and Computer Sciences, University of California, Berkeley	Visitor (<i>under the direction of Prof. P. Varaiya</i>)
1997		Magneti Marelli – Engine Control Division	Scientific Consultant

15/07/1997	31/10/2000	PARADES (<i>Project on Advanced Research on Architectures and Design of Electronic Systems</i>), a research center supported by Cadence, Magneti Marelli, ST Microelectronics, and CNR	Scientific Consultant
02/10/1998	03/11/1998	Department of Electrical Engineering and Computer Sciences, University of California, Berkeley	Visitor (<i>under the direction of Prof. A. Sangiovanni-Vincentelli</i>)
08/01/2008	22/12/2008	PARADES	Scientific Consultant
01/04/2009	31/10/2009	PARADES	Scientific Consultant
10/05/2011	30/09/2011	ALES (<i>Advanced Laboratory on Embedded Systems</i>) a research center of the United Technologies Corporation	Scientific Consultant
07/11/2011	31/12/2011	ALES	Scientific Consultant
01/07/2012	31/12/2012	ALES	Scientific Consultant

Part IV – Teaching experience

IV A – BSc and MSc Courses (at Sapienza, University of Rome)

Acad. Year	Sapienza Degree Program	Course	CFU
1995/1996	BSc (Diploma Univ.) in Electrical Engineering	Foundations of Informatics	5 CFU
1996/1997	BSc (Diploma Univ.) in Computer and System Engineering	Automatic Control (module I)	5 CFU
1999/2000	BSc/MSc in Information Engineering	Automatic Control (module I)	5 CFU
2000/2001	BSc (Diploma Univ.) in Computer and System Engineering	Automatic Control (module I)	5 CFU
		Automatic Control (module II)	5 CFU
2001/2002	MSc in Computer Science Engineering	Digital Control	10 CFU
2002/2003	MSc in Computer Science Engineering	Digital Control	10 CFU
2003/2004	BSc in Management Engineering	Automatic Control	5 CFU
2004/2005	BSc in Management Engineering	Automatic Control	5 CFU
2005/2006	BSc in Management Engineering	Systems Theory	5 CFU
		Automatic Control	5 CFU
2006/2007	BSc in Management Engineering	Systems Theory	5 CFU
		Automatic Control	5 CFU
2007/2008	BSc in Management Engineering	Systems Theory	5 CFU
		Automatic Control	5 CFU
2008/2009	BSc in Management Engineering	Foundations of Automatic Control	9 CFU
2009/2010	BSc in Management Engineering	Foundations of Automatic Control	9 CFU
2010/2011	BSc in Management Engineering	Foundations of Automatic Control	9 CFU
	MSc in Management Engineering	Dynamic Modeling for Management Engineering	3+3 CFU
2011/2012	BSc in Management Engineering	Foundations of Automatic Control	9 CFU
	MSc. in Management Engineering	Modeling and Identification	3+3 CFU

2012/2013	BSc in Management Engineering	Foundations of Automatic Control	9 CFU
	MSc in Management Engineering	Modeling and Identification	3+3 CFU
2013/2014	BSc in Management Engineering	Foundations of Automatic Control	9 CFU
	MSc in Management Engineering	Modeling and Identification	3+3 CFU
2014/2015	BSc in Management Engineering	Foundations of Automatic Control	9+6 CFU
2015/2016	BSc in Management Engineering	Foundations of Automatic Control	9+6 CFU
2016/2017	BSc in Management Engineering	Foundations of Automatic Control	9+6 CFU
2017/2018	BSc in Management Engineering	Foundations of Automatic Control	9+6 CFU
2018/2019	BSc in Management Engineering	Foundations of Automatic Control	9+6 CFU
2019/2020	BSc in Management Engineering	Foundations of Automatic Control	9+6 CFU
2020/2021	BSc in Management Engineering	Foundations of Automatic Control	9+6 CFU

IV B – Postgraduate Courses

Year	Program/School	Lecture/Course
1999	International Summer School on “Experimental physics of gravitational waves”, University of Urbino	Lecture on “An introduction to feedback control systems”
2000	PhD program in Computer Science, University of Udine	Lecture on “Hybrid systems”
2001	PhD program in Systems Engineering, Sapienza University of Rome	Course on “Hybrid systems” (14 hrs)
2001	V CIRA PhD Summer School on “Automotive”	Lecture on “Hybrid systems and automotive control”
2003	VII CIRA PhD Summer School on “Analysis and control of hybrid systems”	Lecture on “Hybrid systems: safety, liveness, deadlocks”
2006	X CIRA PhD Summer School on “Positive systems”	Lectures on “Positive realizations” and “Digital filters design”
2017	PhD program in Engineering in Computer Science, Sapienza University of Rome	Course on “Hybrid systems” (12 hrs)
2018	PhD program in Automatic Control, Bioengineering and Operations Research, Sapienza University of Rome	Course on “Hybrid systems: Computation and control” (28 hrs)
2019	PhD Summer School on Formal Methods for Cyber-Physical Systems, University of Verona	Lecture on “Hybrid systems: modeling and applications”

IV C – Other Appointments and Third Mission

Year	Seminar Title	Institution
1997	Adaptive control of fuel injection	Department of Electrical Engineering, University of L’Aquila
1998	Electronic engine control management: problems and methodologies	Department of Electrical Engineering, University of L’Aquila
1998	Hybrid systems control and modeling	Department of Electrical Engineering

		and Computer Sciences, University of California, Berkeley
1999	Electronic engine control management: problems and methodologies	Department of Electrical Engineering, University of L'Aquila
2000	Electronic engine control management: problems and methodologies	Department of Electrical Engineering, University of L'Aquila
2009	Mathematical models of dynamical systems	MATHESES (<i>Società Italiana di Scienze Matematiche e Fisiche</i>)
2010	Hybrid systems: Mathematical models with continuous and discrete interacting dynamics	MATHESES
2010	Hybrid systems: Mathematical models with continuous and discrete interacting dynamics	In the Embedded Systems course, MSc in Electronic Engineering, Sapienza University of Rome
2011	Hybrid systems: Mathematical models with continuous and discrete interacting dynamics	In the Embedded Systems course, MSc in Electronic Engineering, Sapienza University of Rome
2013	The linear regression and the least squares method	MATHESES
2014	Complex systems: self-organization and emergent behaviors	MATHESES

Part V – Awards, Honors, and Memberships

V A – Awards

Year

2001	<i>IEEE Circuits and Systems Society Guillemin-Cauer best paper Award</i> for the best paper published in the <i>Transactions on Circuits and Systems</i> , (ref. [3])
2005	<i>IFAC Congress Applications Paper Prize</i> for the best application paper at the <i>16th IFAC World Congress</i> , (ref. [70])

V B – Honors

Year

2006	Plenary Speaker at the Second Multidisciplinary International Symposium on “ <i>Positive Systems: System: Theory and Application</i> ”, (ref. [51])
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V C – Memberships

Year

2001	Member of the International Program Committee of the Fourth International Workshop “ <i>Hybrid Systems: Computation and Control</i> ” (HSCC 2001), Rome, 28–31/3/2001
2003	Member of the International Program Committee of the First Multidisciplinary International Symposium on “ <i>Positive System: Theory and Applications</i> ” (POSTA 2003), Rome, 28–30/8/2003
2006	Member of the International Program Committee of the Second Multidisciplinary International Symposium on “ <i>Positive System: Theory and Applications</i> ” (POSTA

2006), Grenoble (FR), 30/8–1/9/2006

2009	Member of the International Program Committee of the Third Multidisciplinary International Symposium on “ <i>Positive System: Theory and Applications</i> ” (POSTA 2009), Valencia (ES), 2–4/9/2009
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Part VI – Organization of Scientific Events

Year

2001	Member of the Organizing Committee of the Fourth International Workshop “ <i>Hybrid Systems: Computation and Control</i> ” (HSCC 2001), Rome, 28–31/3/2001
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2003	Co-chairman and Member of the Organizing Committee of the First Multidisciplinary International Symposium on “ <i>Positive System: Theory and Applications</i> ” (POSTA 2003), Rome, 28–30/8/2003
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Part VII – Participation in Scientific Projects

Year

Title

Program

2008	HYCON–Hybrid Control: Taming Heterogeneity and Complexity of Networked Embedded Systems, <i>Co-responsible</i> of the WP 4c: Automotive control	EU FP6-IST, ID: 511368
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2009	SPEEDS–Speculative and exploratory design in systems engineering, WP 3.1: Scalable analysis methods, and WP 3.2: Analysis implementation	EU FP6-IST, ID: 033471
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2011	SPRINT–Software Platform for Integration of Engineering and Things. <i>Scientific director</i> of the subproject <i>Taxibot</i> for the synthesis and formal verification of the cruise control of an aircraft	EU FP7-ICT, ID: 257909
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2012	DANSE–Design for Adaptability and Evolution in System of systems Engineering. <i>Scientific director</i> .	EU FP7-ICT, ID: 287716
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2018	<i>Co-responsible</i> for the scientific collaboration with the CREA Research Center for Food and Nutrition (Council for Agricultural Research and Economics) for the analysis of food consumption data, nutritional status of the population, incidence of nutritional diseases, and for their mathematical modeling.	
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2020	SYSTEMIC–An integrated approach to the challenge of sustainable food systems: adaptive and mitigatory strategies to address climate change and malnutrition (ERA-HDHL KH FNS)	EU H2020, ID:696300
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Part VIII – Books

VIII A – Teaching Books

B1	L. Benvenuti, A. De Santis, and L. Farina. <i>Sistemi dinamici - Modellistica, analisi e controllo</i> . McGraw–Hill, Milano, 2009. ISBN 978–88–386–6538–7
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B2 L. Benvenuti, A. De Santis, and L. Farina (Eds.). *Positive Systems*, volume 294 of *Lecture Notes in Control and Information Sciences*. Springer-Verlag Berlin, Heidelberg, D, 2003. ISBN 978-3-540-40342-5. <https://doi.org/10.1007/b79667>

Part IX – Research Activities

Keywords

Brief Description

Output tracking for nonlinear non-minimum phase systems	An unstable zero-dynamics is a known obstruction to inducing exact asymptotic tracking for an open set of output trajectories with internal stability. The research in this field proposed a procedure for achieving approximate tracking for a MIMO nonlinear system whose linearization possesses real right-half plane zeros. The method is guaranteed to remove the right-half plane zeros while the other zeros remain in their previous location; moreover, it provides information on the class of signals for which good approximate tracking can be obtained.
References	[1], [56], [57], [77], [78]

The positive realization problem	Positive systems are dynamical systems whose state variables are nonnegative in value at all times. These systems have the peculiar property that any nonnegative input and nonnegative initial state generate a nonnegative state trajectory and output for all times. For such systems, positivity results in a specific sign pattern on the entries of the system's matrices. For example, a discrete-time system is described by nonnegative matrices, i.e., matrices with all nonnegative entries. Consequently, the impulse response of a positive system is a nonnegative sequence. The positive realization problem consists of the converse question: given a system with a nonnegative impulse response, find under which circumstances a realization with all nonnegative entries, called positive realization, does exist and provide an algorithm to construct it (existence problem), determine the minimal allowed dimension of such a realization (minimality problem) and find how all minimal positive realizations are related to each other (generation problem). This problem goes back to the 50s and was first related to the identifiability problem for Hidden Markov Models, then to the determination of internal structures for compartmental systems, and later embedded in the more general framework of positive systems theory. Within this framework, the positive realization problem was reformulated in terms of a geometric condition. The research in this field exploited such a reformulation as a tool for finding the solution to the existence problem and providing partial answers to the minimality problem. These results were applied to the design of digital filters with optical components and charge coupling devices. Some results of the research are summarized in the tutorial paper [9].
References	Existence: [2], [9], [17], [28], [29], [51], [53], [86] Minimality: [5], [11], [15], [16], [21], [24], [30], [34], [66], [67], [81], [85] Applications: [3], [6], [18], [19], [26], [36], [82], [87], [91]

Reachability	In many applicative fields there is the need to model and design complex
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analysis for hybrid systems	systems having a mixed discrete and continuous behavior that cannot be characterized faithfully using either discrete or continuous models only. This is the case, for example, when a discrete control part operates in a continuous environment. These models are called hybrid systems because of their mixed nature. Unfortunately, most of the verification problems for hybrid systems, like reachability analysis, turn out to be undecidable. Because of this, many approximation techniques and tools to estimate the reachable set have been proposed in the literature. However, most of the tools are unable to handle nonlinear dynamics and constraints and have restrictive licenses. The research in this field proposed an open-source framework for hybrid system verification, called ARIADNE, which exploits approximation techniques based on the theory of computable analysis for implementing formal verification algorithms. Some of the results of the research are presented in the paper [12].
References	[12], [54], [55], [73], [76]

Hybrid systems and automotive control	The design of engine control systems has been traditionally carried out using a mix of heuristic techniques validated by simulation and prototyping using approximate average-value models. However, the ever-increasing demands on passengers' comfort, safety, emissions, and fuel consumption imposed by car manufacturers and regulations call for more robust techniques and the use of cycle-accurate models. These models must be hybrid because of the combination of time-domain and event-based behaviors. The research in this field was made in collaboration with Magneti Marelli, Parades, and Ales and proposed a hybrid model of the engine in which both continuous and discrete time-domain, as well as event-based phenomena, are modeled in a separate but integrated manner. Based on this model, the specification of the overall engine control has been formalized by defining and tackling several hybrid control problems such as idle speed control, actual engaged gear identification, power-train control, and air-fuel ratio control in force transients. To solve these problems some theoretical results on hybrid systems were achieved. Some of the results of the research are summarized in the tutorial papers [4] and [95].
References	Hybrid systems theory: [10], [31], [32], [50], [52], [60], [62], [68], [74], [75], [89], [92] Automotive control: [4], [7], [25], [33], [49], [58], [59], [61], [63], [64], [65], [69], [70], [71], [72], [79], [80], [84], [88], [94], [95]

The nonnegative inverse eigenvalue problem	The nonnegative inverse eigenvalue problem (NIEP) is the problem of characterizing all possible spectra of entry-wise nonnegative real matrices. This problem is related to the minimality problem for positive realizations and a complete solution is known only for matrices of dimension 4. This is a long-standing problem that is very difficult and, perhaps, the most prominent problem in matrix analysis. The research in this field proposed a geometrical representation of the spectra of four-dimensional matrices and some new results for Leslie matrices and trace zero doubly stochastic matrices.
References	[8], [13], [39], [41], [42], [45]

Constrained control for linear systems	The results of the research in this field were twofold. First, necessary and sufficient conditions for the existence of positively invariant polytopes were defined and the problem of stabilizing systems under state and control
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	linear constraints was solved using linear programming techniques. Then, the geometrical properties of the reachable set for a linear system with positive control were provided.
References	[20], [22], [23], [27], [35], [37], [38], [40], [83], [90]

Optimization models and nutrition	A systematic methodology to plan menus complying with nutritional and health issues, close to current eating habits, affordable, and with low environmental impact is developed. The methodology relies on a multi-objective optimization model with binary variables. The objectives, that is the greenhouse gas emissions or water needed to serve the menu and its price, are conflicting and therefore a trade-off has to be established by means of the set of Pareto solutions. The application of the methodology to the cases of cycle menus for schools or nursing homes is investigated.
References	[14], [43], [44], [46], [47], [48]

Part X – Summary of Scientific Achievements

Indexing and citations: SCOPUS (07/10/2021)

Impact Factor at the time of publication: Web of Science (07/10/2021)

Product type	Total number	Number in Scopus	Start	End
Teaching Books	1	–	2009	2009
Edited volumes	1	–	2003	2003
Articles in international journals	47	47	1994	2021
Erratum	1	1	2006	2006
Book chapters	4	1	2000	2018
Articles in collected volumes	7	7	2000	2012
Articles in conference proceedings	36	20	1993	2008

17 articles

Data Base	Products	Total citation	Average Cit. per Product	H-index	Normalized H-index ¹	Products with IF ²	Total IF	Average IF per Product
Scopus	76	1897	25,0	23	0,8	–	–	–
Web of Science	–	–	–	–	–	39	72,060	1,848

¹ H index divided by the academic seniority.

² Journal papers with journal IF available for the year of publication, according to Journal Citation Reports.

17 articles in international journals, 184 citations and H-index = 7, in the last 10 years (2011-2020).

Evaluation of Research Quality (VQR 2004-2010)

Publication	Evaluation
Reference [8]	Excellent
Reference [9]	Excellent
Reference [35]	Acceptable

Evaluation of Research Quality (VQR 2011-2014)

Publication	Evaluation
Reference [10]	Excellent
Reference [12]	Excellent

Part XI – List of the publications selected for the evaluation

XI A – Articles in International Journals indexed by SCOPUS

Ref.	Publication details	IF ¹	Cit. ²
1	L. Benvenuti, M. D. Di Benedetto, and J. W. Grizzle. <i>Approximate output tracking for nonlinear non-minimum phase systems with an application to flight control</i> . International Journal of Robust and Nonlinear Control, 4(3):397–414, May–June 1994. ISSN 1049–8923. https://doi.org/10.1002/rnc.4590040307	–	84
2	B. D. O. Anderson, M. Deistler, L. Farina, and L. Benvenuti. <i>Nonnegative realization of a linear system with nonnegative impulse response</i> . IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications, 43(2):134–142, February 1996. ISSN 1057–7122. https://doi.org/10.1109/81.486435	–	134
3	L. Benvenuti, L. Farina, and B. D. O. Anderson. <i>Filtering through combination of positive filters</i> . IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications, 46(12):1431–1440, December 1999. ISSN 1057–7122. https://doi.org/10.1109/81.809545	0,877	38
4	A. Balluchi, L. Benvenuti, M. D. Di Benedetto, C. Pinello, and A. L. Sangiovanni-Vincentelli. <i>Automotive engine control and hybrid systems: Challenges and opportunities</i> . Proceedings of the IEEE, 88(7):888–912, July 2000. ISSN 0018–9219. https://doi.org/10.1109/5.871300	3,253	175
5	L. Benvenuti, L. Farina, B. D. O. Anderson, and F. De Bruyne. <i>Minimal positive realizations of transfer functions with positive real poles</i> . IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications, 47(9):1370–1377, September 2000. ISSN 1057–7122. https://doi.org/10.1109/81.883332	0,595	43
6	L. Benvenuti and L. Farina. <i>The design of fiber-optic filters</i> . IEEE/OSA Journal of Lightwave Technology, 19(9):1366–1375, September 2001. ISSN 0733–8724. https://doi.org/10.1109/50.948284	2,014	40
7	L. Benvenuti, M. D. Di Benedetto, S. Di Gennaro, and A. L. Sangiovanni-Vincentelli. <i>Individual cylinder characteristic estimation for a spark injection engine</i> . Automatica, 39(7):1157–1169, July 2003. ISSN 0005–1098. https://doi.org/10.1016/S0005-1098(03)00077-3	1,683	41
8	L. Benvenuti and L. Farina. <i>Eigenvalue regions for positive systems</i> . Systems & Control Letters, 51(3–4):325–330, March 2004. ISSN 0167–6911. https://doi.org/10.1016/j.sysconle.2003.09.009	0,782	39
9	L. Benvenuti and L. Farina. <i>A tutorial on the positive realization problem</i> . IEEE Transactions on Automatic Control, 49(5):651–664, May 2004. ISSN 0018–9286. https://doi.org/10.1109/TAC.2004.826715	1,545	260
10	A. Balluchi, L. Benvenuti, M. D. Di Benedetto, and A. Sangiovanni-Vincentelli. <i>The design of dynamical observers for hybrid systems: Theory and application to an automotive control problem</i> . Automatica, 49(4):915–925, April 2013. ISSN 0005–	3,132	39

¹ Impact Factor relative to the publication year, when available, according to Web of Science

² Number of citations according to Scopus.

	1098. https://doi.org/10.1016/j.automatica.2013.01.037		
11	L. Benvenuti. <i>Minimal positive realizations of transfer functions with real poles</i> . IEEE Transactions on Automatic Control, 58(4):1013–1017, April 2013. ISSN 0018–9286. https://doi.org/10.1109/TAC.2012.2212612	3,167	10
12	L. Benvenuti, D. Bresolin, P. Collins, A. Ferrari, L. Geretti, and T. Villa. <i>Assume-guarantee verification of nonlinear hybrid systems with ARIADNE</i> . International Journal of Robust and Nonlinear Control, 24(4):699–724, March 2014. ISSN 1049–8923. https://doi.org/10.1002/rnc.2914	3,176	41
13	L. Benvenuti. <i>A geometrical representation of the spectra of four dimensional nonnegative matrices</i> . Linear Algebra and its Applications, 445:162–180, March 2014. ISSN 0024–3795. https://doi.org/10.1016/j.laa.2013.12.019	0,939	5
14	L. Benvenuti, A. De Santis, F. Santesarti, and L. Tocca. <i>An optimal plan for food consumption with minimal environmental impact: the case of school lunch menus</i> . Journal of Cleaner Production, 129:704–713, August 2016. ISSN 0959–6526. https://doi.org/10.1016/j.jclepro.2016.03.051	5,715	26
15	L. Benvenuti. <i>A lower bound on the dimension of minimal positive realizations for discrete time systems</i> . Systems & Control Letters, 135: article 104595, January 2020. ISSN 0167–6911. https://doi.org/10.1016/j.sysconle.2019.104595	2,804	1
16	L. Benvenuti. <i>An upper bound on the dimension of minimal positive realizations for discrete time systems</i> . Systems & Control Letters, 145: article 104779, November 2020. ISSN 0167–6911. https://doi.org/10.1016/j.sysconle.2020.104779	2,804	1

Part XII – Other publications

XII A – Other Articles in International Journals indexed by SCOPUS

Ref.	Publication details	IF ³	Cit. ⁴
17	L. Farina and L. Benvenuti. <i>Positive realizations of linear systems</i> . Systems & Control Letters, 26(1):1–9, September 1995. ISSN 0167–6911. https://doi.org/10.1016/0167-6911(95)90886-3	–	31
18	L. Benvenuti and L. Farina. <i>Discrete-time filtering via charge routing networks</i> . Signal Processing, 49(3):207–215, March 1996. ISSN 0165–1684. https://doi.org/10.1016/0165-1684(96)00018-7	–	25
19	L. Benvenuti and L. Farina. <i>On the class of linear filters attainable with charge routing networks</i> . IEEE Transactions on Circuits and Systems II: Analog and Digital Signal Processing, 43(8):618–622, August 1996. ISSN 1057–7130. https://doi.org/10.1109/82.532010	–	16

³ Impact Factor relative to the publication year, when available, according to Web of Science

⁴ Number of citations according to Scopus.

20	L. Farina and L. Benvenuti. <i>Polyhedral reachable set with positive control</i> . Mathematics of Control, Signals and Systems, 10(4):364–380, 1997. ISSN 0932–4194. https://doi.org/10.1007/BF01211552	0,294	16
21	L. Benvenuti and L. Farina. <i>A note on minimality of positive realizations</i> . IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications, 45(6):676–677, June 1998. ISSN 1057–7122. https://doi.org/10.1109/81.678491	0,739	20
22	L. Benvenuti and L. Farina. <i>Constrained control for uncertain discrete-time linear systems</i> . International Journal of Robust and Nonlinear Control, 8(7):555–565, June 1998. ISSN 1049–8923. <a href="https://doi.org/10.1002/(SICI)1099-1239(199806)8:7<555::AID-RNC329>3.0.CO;2-S">https://doi.org/10.1002/(SICI)1099-1239(199806)8:7<555::AID-RNC329>3.0.CO;2-S	0,256	11
23	L. Farina and L. Benvenuti. <i>Invariant polytopes of linear systems</i> . IMA Journal of Mathematical Control and Information, 15(3):233–240, September 1998. ISSN 0265–0754. https://doi.org/10.1093/imamci/15.3.233	–	21
24	L. Benvenuti and L. Farina. <i>An example of how positivity may force realizations of 'large' dimension</i> . Systems & Control Letters, 36(4):261–266, April 1999. ISSN 0167–6911. https://doi.org/10.1016/S0167-6911(98)00098-X	0,846	31
25	A. Balluchi, L. Benvenuti, M. D. Di Benedetto, and A. L. Sangiovanni-Vincentelli. <i>Hybrid control of force transients for multi-point injection engines</i> . International Journal of Robust and Nonlinear Control, 11(5):515–539, April 2001. ISSN 1049–8923. https://doi.org/10.1002/rnc.596	0,840	5
26	L. Benvenuti and L. Farina. <i>The positive side of filters: a summary</i> . IEEE Circuits and Systems Magazine, 1(3):32–36, Third Quarter 2001. ISSN 1531–636X. https://doi.org/10.1109/7384.963465	–	5
27	L. Benvenuti and L. Farina. <i>Linear programming approach to constrained feedback control</i> . International Journal of Systems Science, 33(1):45–53, January 2002. ISSN 0020–7721. https://doi.org/10.1080/00207720110069122	0,305	7
28	L. Benvenuti and L. Farina. <i>Positive and compartmental systems</i> . IEEE Transactions on Automatic Control, 47(2):370–373, February 2002. ISSN 0018–9286. https://doi.org/10.1109/9.983382	1,553	62
29	L. Benvenuti, A. De Santis, and L. Farina. <i>On model consistency in compartmental systems identification</i> . Automatica, 38(11):1969–1976, November 2002. ISSN 0005–1098. https://doi.org/10.1016/S0005-1098(02)00107-3	1,630	12
30	L. Benvenuti and L. Farina. <i>Minimal positive realizations: a survey of recent results and open problems</i> . Kybernetika, 39(2):217–228, 2003. ISSN 1805–949X. http://www.kybernetika.cz/content/2003/2/217/	0,319	2
31	A. Balluchi, L. Benvenuti, T. Villa, H. Wong-Toi, and A. L. Sangiovanni-Vincentelli. <i>Controller synthesis for hybrid systems with a lower bound on event separation</i> . International Journal of Control, 76(12):1171–1200, August 2003. ISSN 0020–7179.	0,912	12

<https://doi.org/10.1080/0020717031000123616>

32	A. Balluchi, L. Benvenuti, S. Engell, T. Geyer, K. H. Johansson, F. Lamnabhi-Lagarrigue, J. Lygeros, M. Morari, G. Papafotiou, A. L. Sangiovanni-Vincentelli, F. Santucci, and O. Stursberg. <i>Hybrid control of networked embedded systems</i> . European Journal of Control, 11(4–5):478–508, November 2005. ISSN 0947–3580. https://doi.org/10.1016/S0947-3580(05)71047-5	0,841	14
33	A. Balluchi, L. Benvenuti, A. Ferrari, and A. L. Sangiovanni-Vincentelli. <i>Hybrid systems in automotive electronics design</i> . International Journal of Control, 79:375–394, May 2006. ISSN 0020–7179. https://doi.org/10.1080/00207170600587465	0,866	5
34	L. Benvenuti and L. Farina. <i>Correction to: A note on minimality of positive realizations</i> . IEEE Transactions on Circuits and Systems I: Regular Papers, 53(1):215–215, January 2006. ISSN 1549-8328. https://doi.org/10.1109/TCSI.2005.854607	1,139	1
35	L. Benvenuti and L. Farina. <i>The geometry of the reachability set for linear discrete-time systems with positive controls</i> . SIAM Journal on Matrix Analysis and Applications, 28: 306–325, 2006. ISSN 0895–4798. https://doi.org/10.1137/040612531	1,798	7
36	L. Benvenuti and L. Farina. <i>Nonnegative matrices in digital signal processing</i> . Signal Processing, 86:2388–2392, September 2006. ISSN 0165–1684. https://doi.org/10.1016/j.sigpro.2005.11.001	0,669	0
37	L. Benvenuti. <i>On the reachable set for third-order linear discrete-time systems with positive control</i> . Systems & Control Letters, 60(9):690–698, September 2011. ISSN 0167–6911. https://doi.org/10.1016/j.sysconle.2011.05.005	1,222	5
38	L. Benvenuti. <i>On the reachable set for third-order linear discrete-time systems with positive control: the case of complex eigenvalues</i> . Systems & Control Letters, 60(12):1000–1008, December 2011. ISSN 0167–6911. https://doi.org/10.1016/j.sysconle.2011.09.002	1,222	4
39	L. Benvenuti. <i>A note on eigenvalues location for trace zero doubly stochastic matrices</i> . Electronic Journal of Linear Algebra, 30:599–604, September 2015. ISSN 1081–3810. https://doi.org/10.13001/1081-3810.3044	0,463	2
40	L. Benvenuti and L. Farina. <i>Revisiting the linear recursion with nonnegative coefficients problem</i> . Linear Algebra and its Applications, 535:191–194, December 2017. ISSN 0024–3795. https://doi.org/10.1016/j.laa.2017.09.004	0,972	1
41	L. Benvenuti. <i>The NIEP for four dimensional Leslie and doubly stochastic matrices with zero trace from the coefficients of the characteristic polynomial</i> . Linear Algebra and its Applications, 544:286–298, May 2018. ISSN 0024–3795. https://doi.org/10.1016/j.laa.2018.01.016	0,977	3
42	L. Benvenuti. <i>The inverse eigenvalue problem for Leslie matrices</i> . Electronic Journal of Linear Algebra, 35:319–330, August 2019. ISSN 1081–3810. https://doi.org/10.13001/1081-3810.3980	0,631	2

43	L. Benvenuti, A. De Santis, A. Di Sero, and N. Franco. <i>Concurrent economic and environmental impacts of food consumption: are low emissions diets affordable?</i> Journal of Cleaner Production, 236: article 117645, November 2019. ISSN 0959–6526. https://doi.org/10.1016/j.jclepro.2019.117645	7,246	9
44	M. Ferrari, L. Benvenuti, L. Rossi, A. De Santis, S. Sette, D. Martone, R. Piccinelli, C. Le Donne, C. Leclercq, and A. Turrini. <i>Could dietary goals and climate change mitigation be achieved through optimized diet? The experience of modelling the national food consumption data in Italy.</i> Frontiers in Nutrition, 7: article 48, 2020. ISSN 2296-861X. https://doi.org/10.3389/fnut.2020.00048	6,576	7
45	L. Benvenuti. <i>The NIEP and the positive realization problem.</i> Electronic Journal of Linear Algebra, 36:367–384, June 2020. ISSN 1081–3810. https://doi.org/10.13001/ela.2020.5039	0,682	1
46	L. Benvenuti and A. De Santis. <i>Making a sustainable diet acceptable: an emerging programming model with applications to schools and nursing homes menus.</i> Frontiers in Nutrition, 7: article 562833, 2020. ISSN 2296-861X. https://doi.org/10.3389/fnut.2020.562833	6,576	3
47	L. Rossi, M. Ferrari, D. Martone, L. Benvenuti, and A. De Santis. <i>The promotions of sustainable lunch meals in school feeding programs: the case of Italy.</i> Nutrients, 13(5): article 1571, May 2021. ISSN 2072-6643. https://doi.org/10.3390/nu13051571	–	1
48	L. Benvenuti, A. De Santis, and P. Cacchione. <i>Multi-indicator design and assessment of sustainable diet plans.</i> Journal of Cleaner Production, 313: article 127699, September 2021. ISSN 0959–6526. https://doi.org/10.1016/j.jclepro.2021.127699	–	0

XII B – Articles in Collected Volumes (LNCS and LNCIS) indexed by SCOPUS

Cit.⁵

49	A. Balluchi, L. Benvenuti, M. D. Di Benedetto, G. Miconi, U. Pozzi, T. Villa, H. Wong-Toi, and A. L. Sangiovanni-Vincentelli. <i>Maximal safe set computation for idle speed control of an automotive engine.</i> In N. Lynch and B. Krogh, editors, Hybrid Systems: Computation and Control, volume 1790 of <i>Lecture Notes in Computer Science</i> , pages 32–44. Springer–Verlag Berlin, Heidelberg, D, 2000. ISBN 978–3–540–67259–3. https://doi.org/10.1007/3-540-46430-1	29
50	A. Balluchi, L. Benvenuti, M. D. Di Benedetto, and A. L. Sangiovanni-Vincentelli. <i>Design of observers for hybrid systems.</i> In C. J. Tomlin and M. R. Greenstreet, editors, Hybrid Systems: Computation and Control, volume 2289 of <i>Lecture Notes in Computer Science</i> , pages 76–89. Springer–Verlag Berlin, Heidelberg, D, 2002. ISBN 978–3–540–43321–7. https://doi.org/10.1007/3-540-45873-5	227
51	L. Benvenuti. <i>The positive realization problem: past and future challenges.</i> In C. Commault and N. Marchand, editors, Positive Systems, volume 341 of <i>Lecture Notes in Control and Information Sciences</i> , pages 11–18. Springer–Verlag Berlin, Heidelberg, D, 2006. ISBN 978–	0

⁵ Number of citations according to Scopus.

- | | | |
|----|---|----|
| 52 | L. Benvenuti, A. Ferrari, E. Mazzi, and A. L. Sangiovanni-Vincentelli. <i>Contract-based design for computation and verification of a closed-loop hybrid system</i> . In M. Egerstedt and B. Mishra, editors, <i>Hybrid Systems: Computation and Control</i> , volume 4981 of <i>Lecture Notes in Computer Science</i> , pages 58–71. Springer-Verlag Berlin, Heidelberg, D, 2008. ISBN 978-3-540-78928-4.
https://doi.org/10.1007/978-3-540-78929-1 | 27 |
| 53 | L. Benvenuti and L. Farina. <i>The importance of being positive: admissible dynamics for positive systems</i> . In R. Bru and S. Romero-Vivo, editors, <i>Positive Systems</i> , volume 389 of <i>Lecture Notes in Control and Information Sciences</i> , pages 55–62. Springer-Verlag Berlin, Heidelberg, D, 2009. ISBN 978-3-642-02893-9 | 4 |
| 54 | L. Benvenuti, D. Bresolin, P. Collins, A. Ferrari, L. Geretti, and T. Villa. <i>ARIADNE: Dominance checking of nonlinear hybrid automata using reachability analysis</i> . In A. Finkel, J. Leroux, and I. Potapov, editors, <i>Reachability Problems</i> , volume 7550 of <i>Lecture Notes in Computer Science</i> , pages 79–91. Springer-Verlag Berlin, Heidelberg, D, 2012. ISBN 978-3-642-33511-2.
https://doi.org/10.1007/978-3-642-33512-9 | 12 |
| 55 | O. Ferrante, L. Benvenuti, L. Mangeruca, C. Sofronis, and A. Ferrari. <i>Parallel NuSMV: a NuSMV extension for the verification of complex embedded systems</i> . In F. Orteier and P. Daniel, editors, <i>Computer Safety, Reliability, and Security</i> , volume 7613 of <i>Lecture Notes in Computer Science</i> , pages 409–416. Springer-Verlag Berlin, Heidelberg, D, 2012. ISBN 978-3-642-33674-4.
https://doi.org/10.1007/978-3-642-33675-1 | 11 |

XII C – Articles in Conference Proceedings indexed by SCOPUS

Cit.⁶

- | | | |
|----|--|----|
| 56 | C. Tomlin, J. Lygeros, L. Benvenuti, and S. Sastry. <i>Output tracking for a non-minimum phase dynamic CTOL aircraft model</i> . In <i>Proceedings of the 34th IEEE Conference on Decision and Control</i> , pages 1867–1872, New Orleans, LA, USA, December 1995 | 57 |
| 57 | L. Benvenuti, P. Di Giamberardino, and L. Farina. <i>Trajectory tracking for a PVTOL aircraft: a comparative analysis</i> . In <i>Proceedings of the 35th IEEE Conference on Decision and Control</i> , pages 1563–1568, Kobe, Japan, December 1996 | 11 |
| 58 | L. Benvenuti, M. D. Di Benedetto, C. Rossi, and A. L. Sangiovanni-Vincentelli. <i>Injector characteristics estimation for spark ignition engines</i> . In <i>Proceedings of the 37th IEEE Conference on Decision and Control</i> , pages 1546–1551, Tampa, FL, USA, December 1998 | 3 |
| 59 | A. Balluchi, L. Benvenuti, M. D. Di Benedetto, A. Ferrari, C. Pinello, and A. L. Sangiovanni-Vincentelli. <i>Hybrid systems and the design of embedded controllers for automotive engine management</i> . In <i>Proceedings of the 37th IEEE Conference on Decision and Control</i> , pages 2656–2661, Tampa, FL, USA, December 1998 | 2 |
| 60 | A. Balluchi, L. Benvenuti, T. Villa, H. Wong-Toi, and A. L. Sangiovanni-Vincentelli. <i>A case study of hybrid controller synthesis of a heating system</i> . In <i>Proceedings of the 5th European</i> | 3 |

⁶ Number of citations according to Scopus.

61	A. Balluchi, L. Benvenuti, M. D. Di Benedetto, S. Cardellino, C. Rossi, and A. L. Sangiovanni-Vincentelli. <i>Hybrid control of the air-fuel ratio in force transients for multi-point injection engines</i> . In Proceedings of the 38th IEEE Conference on Decision and Control, pages 316–321, Phoenix, AZ, USA, December 1999	2
62	A. Balluchi, L. Benvenuti, T. Villa, H. Wong-Toi, and A. L. Sangiovanni-Vincentelli. <i>Controller synthesis for hybrid systems with lower bounds on event separation</i> . In Proceedings of the 38th IEEE Conference on Decision and Control, pages 3984–3989, Phoenix, AZ, USA, December 1999	7
63	A. Balluchi, L. Benvenuti, M. D. Di Benedetto, T. Villa, H. Wong-Toi, and A. L. Sangiovanni-Vincentelli. <i>Hybrid controller synthesis for idle speed management of an automotive engine</i> . In Proceedings of the 2000 American Control Conference, pages 1181–1185, Chicago, IL, USA, June 2000	8
64	A. Balluchi, L. Benvenuti, and M. D. Di Benedetto. <i>A hybrid observer for the driveline dynamics</i> . In Proceedings of the 6th European Control Conference, pages 618–623, Porto, Portugal, September 2001	32
65	A. Balluchi, L. Benvenuti, L. Berardi, E. De Santis, M. D. Di Benedetto, and G. Pola. <i>Engine idle speed control via maximal safe-set computation in the crank-angle domain</i> . In Proceedings of the 2002 IEEE International Symposium on Industrial Electronics, pages 618–622, L'Aquila, Italy, July 2002	7
66	L. Benvenuti, A. De Santis, and L. Farina. <i>Embedding a-priori positivity in systems modelling</i> . In Proceedings of the 2002 American Control Conference, pages 4626–4631, Anchorage, AK, USA, May 2002	0
67	L. Benvenuti and L. Farina. <i>How many compartments do we really need?</i> In Proceedings of the 2002 American Control Conference, pages 4614–4619, Anchorage, AK, USA, May 2002	0
68	A. Balluchi, L. Benvenuti, M. D. Di Benedetto, and A. L. Sangiovanni-Vincentelli. <i>Observability for hybrid systems</i> . In Proceedings of the 42nd IEEE Conference on Decision and Control, pages 1159–1164, Maui, Hawaii, USA, December 2003	56
69	A. Casagrande, A. Balluchi, L. Benvenuti, A. Policriti, T. Villa, and A. L. Sangiovanni-Vincentelli. <i>Improving reachability analysis of hybrid automata for engine control</i> . In Proceedings of the 43rd IEEE Conference on Decision and Control, pages 2322–2327, Atlantis, Paradise Island, Bahamas, December 2004	7
70	A. Balluchi, L. Benvenuti, C. Lemma, A. L. Sangiovanni-Vincentelli, and G. Serra. <i>Actual engaged gear identification: a hybrid observer approach</i> . In Proceedings of the 16th IFAC World Congress, pages 13–18, Prague, Czech Republic, July 2005	11
71	A. Balluchi, L. Benvenuti, and A. L. Sangiovanni-Vincentelli. <i>Hybrid systems in automotive electronics design</i> . In Proceedings of the 44th IEEE Conference on Decision and Control and the 8th European Control Conference, pages 5618–5623, Seville, Spain, December 2005	3
72	A. Balluchi, L. Benvenuti, M. D. Di Benedetto, T. Villa, and A. L. Sangiovanni-Vincentelli. <i>Idle speed control – a benchmark for hybrid system research</i> . In Proceedings of the 2nd IFAC Conference on Analysis and Design of Hybrid Systems, pages 259–264, Alghero, Italy, June 2006	5

73	L. Benvenuti, D. Bresolin, A. Casagrande, P. Collins, A. Ferrari, E. Mazzi, A. L. Sangiovanni-Vincentelli, and T. Villa. <i>Reachability computation for hybrid systems with ARIADNE</i> . In Proceedings of the 17th IFAC World Congress, Seoul, South Korea, July 2008	20
74	L. Benvenuti, A. Ferrari, L. Mangeruca, E. Mazzi, R. Passerone, and C. Sofronis. <i>A contract-based formalism for the specification of heterogeneous systems</i> . In Forum on Specification & Design Languages, pages 142-147, Stuttgart, Germany, September 2008	33
75	L. Benvenuti, A. Ferrari, E. Mazzi, and A. L. Sangiovanni-Vincentelli. <i>Composing hybrid systems</i> . In Proceedings of the 47th IEEE Conference on Decision and Control, pages 4693-4699, Cancun, Mexico, December 2008	1

XII D – Book chapters indexed by SCOPUS

Cit.⁷

76	O. Ferrante, A. Ferrari, C. Sofronis, L. Mangeruca, and L. Benvenuti. <i>An application of parallel satisfiability solving to the verification of complex embedded systems</i> . In Y. Hamadi and L. Sais, editors, Handbook of Parallel Constraint Reasoning. Springer International Publishing, 2018. ISBN 978-3-319-63515-6	1
----	--	---

XII E – Articles in Conference Proceedings not indexed by SCOPUS

77	L. Benvenuti, M. D. Di Benedetto, and J. W. Grizzle. <i>Trajectory control of an aircraft using approximate output tracking</i> . In Proceedings of the 2nd European Control Conference, pages 1638–1643, Groningen, The Netherlands, June–July 1993
78	L. Benvenuti and M. D. Di Benedetto. <i>End-point tracking for a flexible robot arm</i> . In Proceedings of the 4th IFAC Symposium on Robot Control, pages 687–692, Capri, Italy, September 1994
79	A. Balluchi, L. Benvenuti, M. D. Di Benedetto, A. Ferrari, C. Pinello, and A. L. Sangiovanni-Vincentelli. <i>The design of embedded controllers for automotive engine management: the cut-off case</i> . In Proceedings of the Cadence Technical Conference 1998, pages 183–190, San Antonio, TX, USA, May 1998
80	M. Antoniotti, A. Balluchi, L. Benvenuti, A. Ferrari, C. Pinello, A. L. Sangiovanni-Vincentelli, R. Flora, W. Nesci, C. Rossi, G. Serra, and M. Tabaro. <i>A top-down constraint-driven design methodology for powertrain control system</i> . In Proceedings of the Global Powertrain Congress 1998, Emission, Testing & Controls, pages 74–84, Detroit, MI, USA, October 1998
81	L. Benvenuti, L. Farina, B. D. O. Anderson, and F. De Bruyne. <i>Minimal discrete-time positive realizations of transfer functions with positive real poles</i> . In Proceedings of the Int. Symposium on Mathematical Theory of Networks and Systems, pages 81–84, Padova, Italy, July 1998
82	L. Benvenuti. <i>Positive linear filters with charge routing networks</i> . In Proceedings of the Int. Symposium on Mathematical Theory of Networks and Systems, pages 77–80, Padova, Italy,

⁷ Number of citations according to Scopus.

July 1998

- 83 L. Benvenuti and L. Farina. *Invariance and feedback control with state and input constraints*. In Proceedings of the 6th IEEE Mediterranean Conference: Theory and practice of control and systems, pages 295–300, Alghero, Italy, June 1998
- 84 A. Balluchi, L. Benvenuti, M. D. Di Benedetto, C. Pinello, and A. L. Sangiovanni-Vincentelli. *Automotive engine and power-train control: a comprehensive hybrid model*. In Proceedings of the 8th IEEE Mediterranean Conference on Control and Automation, Patras, Greece, July 2000
- 85 L. Benvenuti and L. Farina. *Minimality of positive systems: recent results and open problems*. In Proceedings of the 1st IFAC Symposium on System Structure and Control, Prague, Czech Republic, August 2001
- 86 L. Benvenuti, A. De Santis, and L. Farina. *Identification of positive linear systems*. In Proceedings of the 8th International Conference on Advances in Communications and Control, Crete, Greece, June 2001
- 87 L. Benvenuti and L. Farina. *The design of fiber-optic filters*. In Proceedings of the 8th International Conference on Advances in Communications and Control, Crete, Greece, June 2001
- 88 A. Balluchi, L. Benvenuti, M. D. Di Benedetto, G. Girasole, and A. L. Sangiovanni-Vincentelli. *Idle speed control design and verification for an automotive engine*. In Proceedings of the International Workshop on Modeling, Emissions and Control in Automotive Engines, Salerno, Italy, September 2001
- 89 A. Balluchi, L. Benvenuti, and A. L. Sangiovanni-Vincentelli. *Observers for hybrid systems with continuous state resets*. In Proceedings of the 10th IEEE Mediterranean Conference on Control and Automation, Lisbon, Portugal, July 2002
- 90 L. Benvenuti and L. Farina. *The geometry of the reachability set for linear discrete-time systems with positive controls*. In Proceedings of the 16th Int. Symposium on Mathematical Theory of Networks and Systems, Catholic University of Leuven, Belgium, July 2004
- 91 L. Benvenuti, A. De Santis, and L. Farina. *Positive filters with charge routing networks for image processing*. In Proceedings of the 16th Int. Symposium on Mathematical Theory of Networks and Systems, Catholic University of Leuven, Belgium, July 2004
- 92 A. Balluchi, L. Benvenuti, and A. L. Sangiovanni-Vincentelli. *Discrete and continuous structural properties for observability*. In Proceedings of the 16th Int. Symposium on Mathematical Theory of Networks and Systems, Catholic University of Leuven, Belgium, July 2004

XII F – Book chapters not indexed by SCOPUS

- 93 L. Benvenuti and M. D. Di Benedetto. *An introduction to feedback control systems*. In M. Barone, G. Calamai, M. Mazzoni, R. Stanga, and F. Vetrano, editors, *Experimental Physics of Gravitational Waves*, pages 327–348. World Scientific, Singapore, 2000. ISBN 978-981-02-4306-7

94	A. Balluchi, L. Benvenuti, M. D. Di Benedetto, and A. L. Sangiovanni-Vincentelli. <i>Idle speed controller synthesis using an assume-guarantee approach</i> . In R. Johansson and A. Rantzer, editors, <i>Nonlinear and Hybrid Systems in Automotive Control</i> , pages 229–243. Springer-Verlag, London, GB, 2002. ISBN 978-1-85233-652-3
95	L. Benvenuti, A. Balluchi, A. Bemporad, S. Di Cairano, B. Johansson, R. Johansson, A. Sangiovanni-Vincentelli, and P. Tunestål. <i>Automotive control</i> . In J. Lunze and F. Lamnabhi-Lagarrigue, editors, <i>Handbook of Hybrid Systems Control: Theory, Tools, Applications</i> , pages 439–469. Cambridge University Press, Cambridge, UK, 2009. ISBN 978-0-521-76505-3

Roma, 7 ottobre 2021

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