Curriculum of the scientific activity of Carla Seatzu

GENERALITIES

Name: **Carla**   Surname: **Seatzu**

Born: in Cagliari, 27th October 1971   Address: via Giardini 149, 09127 Cagliari

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CURRENT POSITON

- **Full Professor of Automatic Control** (ING-INF/04) at the Dep. of Electrical and Electronic Engineering, University of Cagliari (since December 2019).

PREVIOUS POSITIONS

- Jul 2000 ÷ Feb. 2002: **Post-doc student,** research project *"Identification and state reconstruction of discrete event systems modeled with Petri nets"* (supervisor: A. Giua), Dep. of Electrical and Electronic Engineering, University of Cagliari.

- Mar. 2002 ÷ Sep. 2011: **Assistant Professor** (ING-INF/04) at the Dep. of Electrical and Electronic Engineering, University of Cagliari.

- Oct. 2011 ÷ Nov. 2019: **Associate Professor** (ING-INF/04) at the Dep. of Electrical and Electronic Engineering, University of Cagliari.

EDUCATION

- February 1996: **Master degree in Electrical Engineering** (110/110 cum laude), University of Cagliari. Thesis: *"Lyapunov transformations for the stabilization of linear time-variant systems. An application to the movement of suspended loads"* (supervisor: Prof. G. Usai, Univ. of Cagliari).

- January 2000: **Ph.D in Electronic Engineering and Computer Science**, University of Cagliari. Thesis: *"Decentralized control of open-channel hydraulic systems"* (supervisor: Prof. G. Usai, Univ. of Cagliari).

MAIN ACTIVITIES

Research activity

The research activity of Carla Seatzu is mainly focused on the following topics: discrete event systems, hybrid systems, networked control systems, manufacturing systems, transportation systems.

Main institutional positions at the University of Cagliari

- Coordinator of the Laurea Degree in Electrical, Electronic and Computer Engineering (July 2018 – May 2022).

- Vice-Coordinator of the PhD Program in Electronic and Computer Engineering (March 2014 – January 2019).

- Vice-President of the Faculty Committee of Engineering and Architecture (November 2014 – July 2018).

Main Editorial activity

- Senior Editor of the international journals:
    - *IEEE Control Systems Letters* (2017 – 2022),
    - *IEEE Transactions on Automation Science and Engineering* (since 2020),
    - *International Journal of Robotics Research* (since 2023).
- Department Editor of the international journal:
    - *Discrete Event Dyanamic Systems* (since 2020).

- Associate Editor of the international journals:
  - *IEEE Transactions on Automatic Control* (2013 – 2019),
  - *Discrete Event Dyanamic Systems* (2015 – 2020),
  - *IEEE Transactions on Automation Science and Engineering* (2014 – 2017),
  - *Nonlinear Analysis: Hybrid Systems*, Elsevier (2007 – 2016).

Main contributions to the organization of international scientific events

- *General Co-Chair* of the international conference:
  - *ETFA'2013: 18th IEEE Int. Conf. on Emerging Technologies in Factory Automation* (Cagliari, Italy), September 2013 (with R. Zurawski, ISA Group, San Francisco, CA, USA).

- *Program Chair* of the international conference:
  - *CASE'2024: 20th IEEE Int. Conf. on Automation Science and Engineering* (Bari, Italy), August 28-September 1st, 2024.

- *Program Co-Chair* of the international conference:
  - *ETFA'2018: 23rd IEEE Int. Conf. on Emerging Technologies in Factory Automation* (Turin, Italy), September 2018 (with C. Mahuela, Univ. of Zaragoza, Spain).

- *Workshop Chair* of the international conferences:
  - *CDC2016: 55th IEEE Conference on Decision and Control*, (Las Vegas, USA), December 2016;
  - *MED2021: 29th Mediterranean Control Conference,* (Bari, Italy), June 2021.

- *Chair of Work-in-Progress and Industry Practice Papers* for the international conference:
  - *ETFA'2015: 20th IEEE Int. Conf. on Emerging Technologies in Factory Automation* (Luxembourg), Settembre 2015.

- *Special Session Chair* of the international conference:
  - *CASE'2015: 11th IEEE Conf. on Automation Science and Engineering* (Gothenburg, Sweden), Agosto 2015.

- *Chair* of the National Organizing Committee of the international conferences:
  - *ADHS06: 2nd IFAC Conf. on the Analysis and Design of Hybrid Systems* (Alghero, Italy), Giugno 2006.
  - *ETFA'2013: 18th IEEE Int. Conf. on Emerging Technologies in Factory Automation* (Cagliari, Italy), Semptember 2013.

- *Member* of the Steering Committee of the folloowing series of international conferences:
  - ETFA: *Emerging Technology in Factory Automation* (dal 2013).

- *Senior Editor* of the *IEEE Conference on Automation Science and Engineering* (2017 – 2023).

- *Associate Editor* of the Editorial Board of the following societies:
  - *IEEE Control System Society:* for the *American Control Conference* and the *Conference on Decision and Control* (2006-2016);
  - *IEEE Robotics and Automation Society:* for the *Int. Conference on Robotics and Automation* (2011, 2015);
  - *IEEE Robotics and Automation Society:* for the *Conference on Automation Science and Engineering* (2012-2015).

Fellowships

- Lecturing and Research Fellowship Xidian University, Xi'an (China)- Project Grant No. 2017XZ09009 - Fault diagnosis and opacity of discrete event systems.

Technical Comittees

- *Chair* of the *IFAC Technical Committee 1.3 on Discrete Event and Hybrid Systems* (since 2020).
- *Member* of the *Board of Governors* of the *IEEE Control Systems Society* (2020-21).
- *Vice-chair* of the *IFAC Technical Committee 1.3 on Discrete Event and Hybrid Systems* (2017-2020).
- *Co-chair* of the *IEEE IES Technical Committee on Factory Automation - Subcommittee on Industrial Automated Systems and Control* (since 2010).

<u>Activities in research projects</u>

Coordination of international projects

- Local coordinator of the Project *"Compositional Techniques for Analysis of Safety Critical Interconnected Systems"* supported by *Republic of Cyprus and European Regional Development Fund* within the *Programme for Research, Technological Development and Innovation 2009-2010*, coordinated by Prof. C. Hadjicostis, Univ. of Cyprus (2012 – 2014).

Coordination of projects supported by Region Sardinia

- Project of basis and fundamental research supported by Region Sardinia, (two years in 2018 - 2020), RASSR05871: "*Metodi formali per il MOnitoraggio di SIstemi dinamici Multi-Agente (MOSIMA)*".
- Project of basis and fundamental research supported by Region Sardinia, Regional Law 7, 2008 (2010-2012): *"Identification, state reconstruction and diagnosis of discrete event systems using Petri nets"*.
- POR FESR Sardinia 2014 – 2020, Line 1 Action 1.1.3, Strategy 2 "Create job opportunities encouraging the competitiveness among enterprises" (2017-2019): "*UNICARASAU: Optimization of the production process of Carasau bread for the improvment of the automation level and the plant productivity*".
- Project of fundamental research or basis research supported by Region Sardinia, 2017 (2019-2020): "*Formal methods for the monitoring of multi-agent dynamical systems*".

Participation to European research projects and networks of excellence

- 2004: HYCON "Hybrid Control: Taming Heterogeneity and Complexity of Networked Embedded Systems", VI programma quadro (member of the unity of Siena in the European network of excellence).
- 2008÷2011: EUROPEAN PROJECT "Distributed Supervisory Control of Large Plants – DISC" (FP7 - ICT 2007-2), (Coordinator A. Giua, Univ. of Cagliari).
- 2010÷2012: Network of Excellence HYCON2 "Highly-complex and networked control systems" (FP7 – ICT 2009-5), (Coordinator F. Lamnabhi-Lagarrigue, Lab. Des Signaux et Systemes L2S, CNRS, Paris, France).

<u>Visits to foreign universities and research centres</u>

- January 1998: *Visiting student* at *CEMAGREF*, Institut de Recherche pour l'Ingegnerie de l'Agriculture et de l'environement, Montpellier, France.
- December 2004, October 2006, February 2008: *Visiting researcher* at the Dep.to Informática e Ingeneiría de Sistemas, Centro Politécnico Superior, Zaragoza, Spain.
- October 2006: *Visiting Professor* at the Aalborg University, Department of Software and Media Technology, Esbjerg, Denmark.
- January 2013, January 2015, January 2017: *Visiting Professor* at the School of Electrical and Computer Engineering, Georgia Institute of Technology, Atlanta, USA.
- Febbraio 2013: *Visiting Professor* at CINVENSTAV, Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional, Guadalajara, Mexico.
- October 2014: *Visiting Professor* at the University of Cyprus, Nicosia, Cyprus.
- August 2017: *Visiting Professor* at the Zhejiang Gongshang University, Hangzhou, China.
- June, November 2017: *Visiting Professor* at the Xidian University, Xi'an, China.

<u>Plenary Speaker in international conferences:</u>

- *8th Int. Workshop on Verification and Evaluation of Computer and Communication Systems*, Bejaia, Algeria, September 2014), Title: "Fault diagnosis of discrete event systems using Petri nets".
- *21th Int. Conference on System Theory, Control and Computing*, (Sinaia, Romania, October 20, 2017), Title: "Verification of opacity in discrete event sytems".
- *14th Workshop on Discrete Event Systems*, (Sorrento Coast, Italy, June 1, 2018), Title: "Partially observed discrete-event systems: from state estimation to intrusion detection".
- *2th IEEE Int. Conf. on Emerging Technology and Factory Automation* (Zaragoza, Spain, September 2019), Title: "Modeling, analysis and intelligent control of automated manufacturing systems using Petri nets".
- *15th International Conference on Computer and Automation Engineering* (Sidney, Australia, March 3-5, 2023), Title: "Partially observed discrete-event systems: state of the art and open issues".
- *9th International Conference on Control, Decision and Information Technologies* (Rome, Italy, July 3-6, 2023), Title: "State estimation and event inference in discrete event systems".

PUBLICATIONS

- Author of one textbook (in Italian)
- Co-editor of 2 international books
- Proceedings of 2 international conferences
- Co-editor of 4 special issues/sessions in international journals
- Author/co-author of 94 papers on international journals (including 33 papers in IEEE Trans. on Automatic Control and Automatica)
- Co-author of 15 chapters in international books
- Author/co-author of 165 papers in the proceedings of international conferences

Bibliometric indices (February 9th, 2023)

- Papers on Scopus: 271
- Number of citations on Scopus: 4976
- Number of citations on Google Scholar: 7234
- H index on Scopus: 38
- H index on Google Scholar: 45

PUBLICATIONS

Books

[B1] A. Giua, C. Seatzu, *Analisi dei Sistemi Dinamici*, Springer-Verlag Italia (in Italian);
First edition: 2006, ISBS-10 8847002842, ISBN-13: 978-8847002845;
Second edition: 2009, ISBN-10: 8847014832, ISBN-13: 978-8847014831.

[B2] C. Seatzu, M. Silva, J.H. van Schuppen (Eds), *Control of Discrete-Event Systems. Automata and Petri Net Perspectives*, in Lecture Notes in Control and Information Science, Springer, Vol. 433, 2013.
ISSN 0170-8643, ISBN 978-1- 4471- 4275-1.

[B3] J. Campos, C. Seatzu, X. Xie (Eds), *Formal Methods in Manufacturing*, CRC Press, Taylor & Francis Group, 2014.
ISBN-13 978-1466561557.

Proceedings of international conferences

[P1] C.G. Cassandras, A. Giua, C. Seatzu, J. Zaytoon (Eds), *Analysis and Design of Hybrid Systems 2006*, in IFAC Proceedings Volumes, Elsevier, 2006.
ISBN-13 978-0-08-044613-4, ISBN-10 0-08-044613-2.

[P2] C. Seatzu (Ed), *Proceedings 18th IEEE Conf. on Emerging Technologies and Factory Automation*, 2013.
ISBN: 978-1-4799-0864-6.

Editorials of special issues or sessions in international conferences

[E1] C.G. Cassandras, A. Giua, C. Seatzu, J. Zaytoon, "DEDS Special Issue on Discrete Event Methodologies for Hybrid Systems*", Discrete Event Dynamic Systems*, Vol. 18, N. 2, pp. 161-162, June 2008.
DOI: 10.1007/s10626-008-0043-6, ISSN: 0924-6703

[E2] C.G. Cassandras, A. Giua, C. Seatzu, J. Zaytoon, "Editorial Special Issue on Analysis and Design of Hybrid Systems*", Nonlinear Analysis: Hybrid Systems*, Vol. 2, N. 3, pp. 695-696, August 2008.
DOI: 10.1016/j.nahs.2007.11.002, ISSN: 1751-570X

[E3] C.G. Cassandras, A. Giua, C. Seatzu, J. Zaytoon, "Preface Special Section: IFAC Conference on Analysis and Design of Hybrid Systems*", Control Engineering Practice*, Vol. 16, N. 8, pp. 959-960, August 2008.
DOI: 10.1016/j.conengprac.2011.10.012, ISSN: 0967-0661

[E4] C.G. Cassandras, M.P. Fanti, C.N. Hadjicostis, S. Reveliotis, C. Seatzu, "Guest Editorial: Special Issue on Advances in Discrete Event Systems for Automation", *IEEE Trans. on Automation Science and Engineering*, Vol. 11, No. 1, pp. 3-5, January 2014.
DOI: 10.1109/TASE.2013.2293003, ISSN: 1545-5955

Papers on international journals

[R1] A. Giua, C. Seatzu, G. Usai, "Observer-controller design for cranes via Lyapunov equivalence", *Automatica*, Vol. 35, N. 4, pp. 669-678, April 1999 (*Brief Paper*).
DOI: 10.1016/S0005-1098(98)00204-0, ISSN: 0005-1098

[R2] C. Seatzu, "Design and robustness analysis of decentralized constant volume-control for open channels", *Applied Mathematical Modelling*, Vol. 23, N. 6, pp. 479-500, June 1999.
DOI: 10.1016/S0307-904X(98)10094-X, ISSN: 0307-904X

[R3] A. Giua, C. Seatzu, G. Usai, "Semiactive suspension design with an optimal gain switching target", *Vehicle System Dynamics*, Vol. 31, N. 4, pp. 213-232, April 1999.
DOI: 10.1076/vesd.31.4.213.4233, ISSN: 0042-3114

[R4] C. Seatzu, "Design of decentralized constant-volume controllers for open-channels by solving a least squares problem", *Int. J. of Systems Science*, Vol. 31, N. 6, pp.759-770, June 2000.
DOI: 10.1080/00207720050030806, ISSN: 0020-7721

[R5] C. Seatzu, "A fitting based method for parameter estimation in S-Systems", *Dynamic Systems and Applications*, Vol. 9, N. 1, pp. 77-98, March 2000.

[R6] C. Seatzu, "Decentralized controllers design for open-channel hydraulic systems via eigenstructure assignment", *Applied Mathematical Modelling*, Vol. 24, N. 12, pp. 915-930, December 2000.
DOI: 10.1016/S0307-904X(00)00025-1, ISSN: 0307-904X

[R7] A. Giua, C. Seatzu, G. Usai, "A mixed suspension system for a half-car vehicle model", *Dynamics and Control*, Vol. 10, N. 4, pp. 375-397, December 2000.
DOI: 10.1023/A:1011225717339, ISSN: 09254668

[R8] F. Balduzzi, A. Di Febbraro, A. Giua, C. Seatzu, "Decidability results in First-Order Hybrid Petri Nets", *Discrete Event Dynamic Systems"*, Special Issue on *Hybrid Petri Nets*, Vol. 11, N. 1 & 2, pp. 41-58, January 2001.
DOI: 10.1023/A:1008383031624, ISSN: 0924-6703

[R9] F. Balduzzi, A. Giua, C. Seatzu, "Modelling and simulation of manufacturing systems with First-Order Hybrid Petri Nets", *Int. J. of Production Research*, Special Issue on *Modeling, Specification and Analysis of Manufacturing Systems*, Vol. 39, N. 2, pp. 255-282, 2001.
DOI: 10.1080/00207540010004278, ISSN: 0020-7543

[R10] A. Giua, R. Furcas, A. Piccaluga, C. Seatzu, "Hybrid Petri net modeling of inventory management systems", *European Journal of Automation*, *APII_JESA*, Special Issue on *Hybrid Dynamical Systems*, Vol. 35, N. 4, pp. 417-434, May 2001.
ISSN: 12696935

[R11] A. Giua, M. Sanna, C. Seatzu, "Observer-controller design for three dimensional overhead cranes using time-scaling", *Mathematical and Computer Modelling of Dynamical Systems*, Vol. 7, N. 1, pp. 77-107, March 2001.
DOI: 10.1076/mcmd.7.1.77.3634

[R12] A. Giua, A. Piccaluga, C. Seatzu, "Firing rate optimization of cyclic timed event graphs by token allocations", *Automatica*, Vol. 38, N. 1, pp. 91-103, January 2002 (Regular Paper).
DOI: 10.1016/S0005-1098(01)00189-3, ISSN: 0005-1098

[R13] A. Giua, C. Seatzu, "Observability of Place/Transition nets", *IEEE Trans. on Automatic Control*, Vol. 47, N. 9, pp. 1424 - 1437, September 2002 (Regular Paper).
DOI: 10.1109/TAC.2002.802769, ISSN: 0018-9286

[R14] C. Seatzu, G. Usai, "A decentralized volume variations observer for open-channels", *Applied Mathematical Modelling*, Vol. 26, N. 10, pp. 975 – 1001, October 2002.
DOI: 10.1016/S0307-904X(02)00055-0, ISSN: 0307-904X

[R15] A. Giua, C. Seatzu, F. Basile, "Observer-based state-feedback control of timed Petri nets with deadlock recovery", *IEEE Trans. on Automatic Control*, Vol. 49, N. 1, pp. 17-29, January 2004 (Regular Paper).
DOI: 10.1109/TAC.2003.821419, ISSN: 0018-9286

[R16] A. Giua, M. Melas, C. Seatzu, G. Usai, "Design of a predictive semiactive suspension system", *Vehicle System Dynamics*, Vol. 41, N. 4, pp. 277-300, April 2004.
DOI: 10.1080/00423110412331315169, ISSN: 0042-3114

[R17] A. Giua, J. Júlvez, C. Seatzu, "Marking estimation of Petri nets with pairs of nondeterministic transitions", *Asian Journal of Control*, Special Issue on *Control of Discrete Event Systems*, Vol. 6, N. 2, pp. 270-280, June 2004.
DOI: 10.1111/j.1934-6093.2004.tb00204.x, ISSN: 1561-8625

[R18] D. Corona, A. Giua, C. Seatzu, "Optimal control of hybrid automata: an application to the design of semiactive suspension", *Control Engineering Practice*, Special Issue on *Hybrid Dynamic Systems*, Vol. 12, N. 10, pp. 1305-1318, October 2004.
DOI: 10.1016/j.conengprac.2004.03.014, ISSN: 0967-0661

[R19] A. Giua, M.T. Pilloni, C. Seatzu, "Modelling and simulation of a bottling plant using hybrid Petri nets", *Int. J. of Production Research*, Vol. 43, N. 7, pp. 1375-1395, April 2005.
DOI: 10.1080/00207540412331299602, ISSN: 0020-7543

[R20] A. Giua, D. Corona, C. Seatzu, "State estimation of λ-free labeled Petri nets with contact-free nondeterministic transitions", *Discrete Event Dynamic Systems*, Vol. 15, N. 1, pp. 85-108, January 2005.
DOI: 10.1007/s10626-005-5239-4, ISSN: 0924-6703

[R21] C. Seatzu, D. Corona, A. Giua, A. Bemporad, "Optimal control of continuous-time switched affine systems", *IEEE Trans. on Automatic Control*, Vol. 51, N. 5, pp. 726-741, May 2006 (Regular Paper).
DOI: 10.1109/TAC.2006.875053, ISSN: 0018-9286

[R22] A. Giua, M.P. Fanti, C. Seatzu, "Monitor design for colored Petri nets: an application to deadlock prevention in railway networks", *Control Engineering Practice*, Vol. 14, N. 10, pp. 1231-1247, October 2006.
DOI: 10.1016/j.conengprac.2006.02.007, ISSN: 0967-0661

[R23] C. Seatzu, "Discrete, Continuous, and Hybrid Petri Nets. R. David, H. Alla. Springer-Verlag Berlin Heidelberg 2005", Book review, *Int. J. of Robust and Nonlinear Control*, Vol. 15, N. 14, pp. 637-640, September 2005.
DOI: 10.1002/rnc.1029, ISSN: 1049-8923

[R24] C. Seatzu, D. Gromov, J. Raisch, D. Corona, A. Giua, "Optimal control of discrete-time hybrid automata under safety and liveness constraints", *Nonlinear Analysis: Theory, Methods and Applications*, Elsevier, Vol. 65, N. 6, Special Issue *Hybrid Systems and Applications* (5), pp. 1188-1210, September 2006.
DOI: 10.1016/j.na.2005.12.024, ISSN: 0362-546X

[R25] D. Corona, A. Giua, C. Seatzu, "Marking estimation of Petri nets with silent transitions", *IEEE Trans. on Automatic Control*, Vol. 52, N. 9, pp. 1695-1699, September 2007 (Technical Note).
DOI: 10.1109/TAC.2007.904281, ISSN: 0018-9286

[R26] M.P. Cabasino, A. Giua, C. Seatzu, "Identification of Petri nets from knowledge of their language", *Discrete Event Dynamic Systems*, Vol. 17, N. 4, pp. 447-474, December 2007.
DOI: 10.1007/s10626-007-0025-0, ISSN: 0924-6703

[R27] M. Dotoli, M.P. Fanti, A. Giua, C. Seatzu, "First-Order Hybrid Petri nets. An application to distributed manufacturing systems", *Nonlinear Analysis: Hybrid Systems,* Elsevier, Vol. 2, N. 2, pp. 408-430, June 2008.
DOI: 10.1016/j.nahs.2006.05.005, ISSN: 1751-570X

[R28] A. Giua, C. Seatzu, "Modeling and supervisory control of railway networks using Petri nets", *IEEE Trans. on Automation Science and Engineering*, Vol. 5, N. 3, pp. 431-445, July 2008 (Regular Paper).
DOI: 10.1109/TASE.2008.916925, ISSN: 1545-5955

[R29] C. Mahulea, A. Giua, L. Recalde, C. Seatzu, M. Silva, "Optimal model predictive control of timed Continuous Petri nets", *IEEE Trans. on Automatic Control*, Vol. 53, N. 7, pp. 1731-1735, August 2008, (Technical Note).
DOI: 10.1109/TAC.2008.929386, ISSN: 0018-9286

[R30] A. Giua, T. Paschedag, C. Seatzu, "Constrained optimal control: an application to semiactive suspension", *Int. J. of Systems Science*, Vol. 41, N. 7, pp. 797-811, July 2010.
DOI: 10.1080/00207720903366023, ISSN: 0020-7721

[R31] M. Franceschelli, A. Giua, C. Seatzu, "A gossip-based algorithm for discrete consensus over heterogeneous networks", *IEEE Trans. on Automatic Control*, Vol. 55, N. 5, pp. 1244-1249, May 2010 (Technical Note).
DOI: 10.1109/TAC.2010.2042360, ISSN: 0018-9286

[R32] M.P. Cabasino, A. Giua, C. Seatzu, "Fault detection for discrete event systems using Petri nets with unobservable transitions", *Automatica*, Vol. 46, N. 9, pp. 1531-1539, September 2010 (Brief Paper).
DOI: 10.1016/j.automatica.2010.06.013, ISSN: 0005-1098

[R33] M. Franceschelli, A. Giua, C. Seatzu, "Distributed Averaging in Sensor Networks Based on Broadcast Gossip Algorithms", *IEEE Sensors Journal*, Vol. 11, N. 3, pp. 808-817, March 2011 (Regular Paper).
DOI: 10.1109/JSEN.2010.2064295, ISSN: 1530-437X

[R34] M.P. Cabasino, A. Giua, M. Pocci, C. Seatzu, "Discrete event diagnosis using labeled Petri nets. An application to manufacturing systems", *Control Engineering Practice*, Vol. 19, N. 9, pp. 989-1001, September 2011.
DOI: 10.1016/j.conengprac.2010.12.010, ISSN: 0967-0661

[R35] M. Franceschelli, A. Giua, C. Seatzu, "Quantized consensus in Hamiltonian graphs", *Automatica*, Vol. 47, N. 11, pp. 2495-2503, November 2011 (Brief Paper).
DOI: 10.1016/j.automatica.2011.08.032, ISSN: 0005-1098

[R36] M.P. Cabasino, C. Mahulea, C. Seatzu, M. Silva, "Fault Diagnosis of Discrete-Event Systems using Continuous Petri Nets", *IEEE Trans. on Systems, Man and Cybernetics – Part A*, Vol. 42, N. 4, pp. 970-984, July 2012 (Regular Paper).
DOI: 10.1109/TSMCA.2012.2183358, ISSN: 1083-4427

[R37] M.P. Cabasino, A. Giua, S. Lafortune, C. Seatzu, "A new approach for diagnosability analysis of Petri nets using Verifier Nets", *IEEE Trans. on Automatic Control,* Vol. 57, N. 12, pp. 3104-3117, December 2012, (Regular Paper).
DOI: 10.1109/TAC.2012.2200372, ISSN: 0018-9286

[R38] M.P. Cabasino, A. Giua, C. Seatzu, "Diagnosis using labeled Petri nets with silent or undistinguishable fault events", *IEEE Trans. on Systems, Man and Cybernetics – Systems*, Vol. 43, N. 2, pp. 345-355, March 2013 (Regular Paper).
DOI: 10.1109/TSMCA.2012.2199307, ISSN: 2168-2216

[R39] M. Franceschelli, A. Gasparri, A. Giua, C. Seatzu, "Decentralized estimation of Laplacian eigenvalues in multi-agent systems", *Automatica*, Vol. 49, N. 4, pp. 1031-1036, April 2013 (Brief Paper).
DOI: 10.1016/j.automatica.2013.01.029, ISSN: 0005-1098

[R40] Y. Wardi, A. Giua, C. Seatzu, "IPA for continuous stochastic marked graphs", *Automatica*, Vol. 49, N. 5, pp. 1204-1215, May 2013 (<u>Regular Paper</u>).
DOI: 10.1016/j.automatica.2013.02.006, ISSN: 0005-1098

[R41] M.P. Cabasino, S. Lafortune, C. Seatzu, "Optimal sensor selection for ensuring diagnosability in labeled bounded Petri nets", *Automatica*, Vol. 49, N. 8, pp. 2373-2383, August 2013 (<u>Regular Paper</u>).
DOI: 10.1016/j.automatica.2013.04.041, ISSN: 0005-1098

[R42] M. Franceschelli, D. Rosa, C. Seatzu, F. Bullo, "Gossip algorithms for heterogeneous multi-vehicle routing problems", *Nonlinear Analysis: Hybrid Systems*, Vol. 10, N. 1, pp. 156-174, November 2013.
DOI: 10.1016/j.nahs.2013.03.001, ISSN: 1751-570X

[R43] M.P. Cabasino, A. Giua, A. Paoli, C. Seatzu, "Decentralized diagnosis of discrete event systems using labeled Petri nets", *IEEE. Trans. on Systems, Man and Cybernetics – Systems*, Vol. 43, N. 6, pp. 1477-1485, November 2013 (<u>Technical Note</u>).
DOI: 10.1109/TSMC.2013.2244208, ISSN: 2168-2216

[R44] D. Corona, A. Giua, C. Seatzu, "Stabilization of switched systems via optimal control", *Nonlinear Analysis: Hybrid Systems*, Vol. 11, N. 1, pp. 1-10, January 2014.
DOI: 10.1016/j.nahs.2013.02.002, ISSN: 1751-570X

[R45] M.P. Cabasino, A. Giua, C. Seatzu, "Diagnosability of discrete event systems using labeled Petri nets", *IEEE Trans. on Automation Science and Engineering*, Vol. 11, N. 1, pp. 144-153, January 2014 (<u>Brief Paper</u>).
DOI: 10.1109/TASE.2013.2289360, ISSN: 1545-5955

[R46] M.P. Cabasino, A. Giua, A. Paoli, C. Seatzu, "A remark on decentralized diagnosis of labeled Petri nets", *IEEE. Trans. on Systems, Man and Cybernetics – Systems*, Vol. 44, N. 11, pp. 1549, November 2014.
DOI: 10.1109/TSMC.2014.2328604, ISSN: 10834427

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