



CURRICULUM VITAE

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Short Bio

Alessandro Marino was born in Potenza, Italy, on 1st of March 1982. He received the Laurea Degree summa cum Laude in Computer Science (5 years course) in March 2006 in Computer Science at the University of Naples Federico II. In March 2010 he received the Ph.D Degree (3 years) in Industrial Innovation Engineering at the University of Basilicata, Italy.

He is currently Assistant Professor (tenured) of Automatic Control at the University of Salerno, Italy.

From April 2007 to September 2007 he was visiting scholar at the University of Tennessee, Knoxville, Tennessee, under the supervision of Prof. Lynne E. Parker. From June 2010 to September 2011 he was visiting scholar at the [Institute for Systems and Robotics](#) of the [Instituto Superior Técnico](#) under the supervision of Prof. António Pascoal.

From 2007 to 2009 he was part of the ROSED Research Project aimed at building a PC-based open architecture for cooperative robotic work cells funded by the Italian Space Agency.

From 2010 to 2011 he was part of the European Project [Co3-AUVs](#) (Cooperative Cognitive Control for Autonomous Underwater Vehicles) aimed at developing, implementing and testing advanced cognitive systems for coordination and cooperative control of multiple AUVs.

From 2013 to 2016, he was managing LOCOMACHS and STEP FAR projects about the application of robotized solutions to aircraft manufacturing. He is currently Principal Investigator of the H2020 Project LABOR-Lean robotized AssemBly and cOntrol of composite aeRostructures under GA n. 785419.

He is Senior Member of Institute of Electrical and Electronic Engineers (IEEE) and of the Italian Society of Professors and Researches of Automatic Control (SIDRA).

PERSONAL DATA

Born March 1st, 1982, Potenza, Italy

Address Via De Gerani, 63G, 85100, Potenza (PZ), Italy,

Nationality Italy

CURRENT POSITION

(Dec.11-present) Assistant Professor (tenured) at the University of Salerno, Italy. National Scientific Qualification to Associate Professor granted by the Ministry of Instruction, University and Research in 2017.

EDUCATION

(Nov.06-Mar.10) **Ph.D Degree** (3 years) in “Industrial Innovation Engineering” at the University of Basilicata, Italy in March 2010.
Scientific area: Control Engineering (Automation and Control)
PhD Thesis: Coordination control of multiple mobile robots.
Tutor: Prof. Fabrizio Caccavale, Prof. Gianluca Antonelli

(Sept.00-Mar.06) Master Degree cum Laude in Computer Engineering (5 years) in 2006 at the University of Naples Federico II.
MS Thesis: “Modelling and control of cooperative manipulators” (in Italian).

(Sept.95-Jul.00) Scientific secondary school degree, received in 2000 at “Galileo Galilei” Liceo Scientifico, Potenza, Italy. Mark: 100/100.

PREVIOUS EXPERIENCES

(Feb.15–May.15) European Expert Reviewer for Clean Sky JU

(Jul.10–Jul.11) Post-doc – Computer Science Department, University of Cassino, Italy

(Sept.11–Dec.11) CIRA - Italian Aerospace Research Centre (Capua, CE, Italy).
➤➤ *Main activities and responsibilities.* Test Engineer / Researcher in the flight system control group. Control and Planning of experimental activities. Data reporting. Project manager. Task and WP leader.

ACHIEVEMENTS IN TECHNOLOGY TRANSFER IN TERMS OF PARTICIPATION IN THE CREATION OF NEW ENTERPRISES (SPIN OFF), DEVELOPMENT, DEPLOYMENT AND COMMERCIALIZATION OF PATENTS

- (2009-2011) Consultant of CREATE consortium for the development of constrained trajectory planning of industrial robots for point-to-point and fly motions commissioned by COMAU Robotics, Beinasco (Torino), Italy.
- (2007-2009) Member of the team for the RObotics SErviceing Demonstrator-ROSED projects, aimed to the installation of a cooperative robotic cell at the Italian Space Agency (ASI), Matera, Italy.
➤➤ *Main activities and responsibilities.* He carried out the setup of the real-time operative system and he contributed to the development and test of an API for realizing cooperative control algorithms. A Linux-based software environment was the core of the controller, capable of integrating: two communication links to/from the manipulators motors drives/joints sensors, measurements from two wrist-mounted force/torque sensors, management of the two grippers mounted at the end effector of each manipulator and of two joysticks issuing cartesian motion commands.

PARTICIPATION TO NATIONAL AND EUROPEAN RESEARCH PROJECTS

- (Oct.17–present). H2020 Project LABOR-Lean robotized AssemBly and cOntrol of composite aeRostructures under GA n. 785419.
➤➤ *Main activities and responsibilities.* Proposal writing. Budget and planning definition. He is Principal Investigator and Work Package Leader. The main task within the project is to design human-robot cooperative strategies for aircraft assembly operations.
- (Mar.12–Jun.16). FP7-ICT-2007-3, LOCOMACHS (Low Cost Manufacturing and Assembly of Composite and Hybrid Structures-Project Coordinator: SAAB Group)
➤➤ *Main activities and responsibilities.* He was in charge of all the management and technical activities. Task leader. Concerning the management activities, he was in charge of preparing contributions to deliverables, and of participating at all the web-meetings (every two weeks) and all annual review meetings for presenting the technical activities carried out by the University of Salerno-DIEM and by the third party Second University of Naples. Concerning the technical activities, he was in charge of the setup of the work-cell, of developing and testing solutions for force based cooperative robotized drilling of aircraft aluminium stacks by two cooperative Comau SmartSix robots.
- (Apr.14-Sett.17) DAC_PON03PE_00129, STEP FAR (Sviluppo di materiali e Tecnologie Ecocompatibili, di Processi di Foratura, taglio e di Assemblaggio Robotizzato).
➤➤ *Main activities and responsibilities.* He was in charge of almost all the management and all technical activities. Concerning the management activities, he was in charge, as unique representative of Salerno, of participating to all local and non-local meetings for activity coordination. Concerning the technical activities, he was in charge of the setup of the work-cell, of developing and testing solutions for force based cooperative robotized drilling of aircraft carbon fibre-aluminium stacks by two cooperative Comau SmartSix robots. Moreover, a third robot was added in coordination with the

other two robots for the transportation of a high resolution camera sensor for parts and robot localizations. Vision algorithms were designed by University of Naples.

- (2009-2013)** FP7-ICT-2007-2013, ECHORD, European Clearing House for Open Robotics Development.
➤➤ *Main activities and responsibilities (January 2012-2013)*. He was in charge of monitoring technical activities of 8 funded projects (every two months) within ECHORD, of analysing periodic reports, deliverables and delay with respect to plans, and of participating to meetings held at partners laboratories. He was also involved in the design and development of the assessment phase of the project.
- (2009-2012)** FP7-ICT-2007-3: Co3AUVs, Cooperative Cognitive Control for Autonomous Underwater Vehicles.
➤➤ *Main activities and responsibilities (June 2010-July2011)*. Development of coordination algorithms for distributed patrolling in marine scenarios. Within this project, he designed and tested on team of three surface vehicles (during his stay at the ISR Institute-Lisbon) and on a team of two underwater vehicles (NURC-La Spezia) patrolling algorithms based on Gaussian Processes.
- (2009-2012)** PRIN 2009 "ROCOCÒ - COoperative and COllaborative Robotics". Design of technical solution for cooperative robots.

RESEARCH AT FOREIGN INSTITUTION AND AGREEMENT

- (Feb.17)** Visiting Researcher at UniTwente, Netherlands.
- (2016-present)** Responsible of the Erasmus Traineeship Agreement with the Robotics and Mechatronic Group-University of Twente, Nederland.
- (2015-present)** Responsible of the Erasmus Agreement with Research Center Tecnalia-San Sebastiao, Spagna
- (2015-present)** Responsible of the Erasmus Agreement with LAAS-CNRS (Resp. Antonio Franchi).
- (May.2014)** Invited speaker at ICRA 2014 workshop (Taxonomies Of Interconnected Systems: Topology In Distributed Robotics)
- (Jul.2011)** Visiting Researcher at Institute for Systems and Robotics / IST, Lisbon. Prof. Antònio Pascoal Advisor.
- (Apr.07-Sept.07)** Visiting scholar at University of Knoxville (at Distributed Intelligence Laboratory). Prof. Lynne E. Parker Advisor.

OTHER ACTIVITIES

- (2017)** Member of the evaluation panel for “Programma Operativo Regionale FSE 2014-2020 Regione Autonoma Della Sardegna- CCI 2014IT05021.
- (2016)** Chair session at ICRA-IEEE International Conference on Robotics and automation.
- (2016)** Organizer of seminars about LabView for Control, taught by National Instruments.
- (2015)** Invited speaker for the workshop “Taxonomies Of Interconnected Systems: Asymmetric Interactions In Distributed Robotics”, IEEE ICRA International Conference on Robotics and Automation 2015.
- (2015)** Member of the evaluation panel for the European Commission-Clean Sky 2 Joint Undertaking. Call for Proposal: H2020-CS2-CFP-01-2014-01-"Large Passenger Aircraft Automation in Final Aircraft Assembly Lines and Enabling Technologies”
- (2015)** Invited by National Instruments for participation at the Round Table about Cyber-Physical Systems, Delft, Holland.
- (2014)** Reviewer of research proposals for the Israel Science Foundation (ISF).
- (2009)** Invited talk about Multi-Robot systems and Multi-Robot patrolling at PhD School-Bertinoro.
- (2009)** Co-author of the finalist "Best Paper Robotics" at the 2009 IEEE International Conference on Robotics and Biomimetics.
- (2010)** Chair session at 7th IFAC Symposium on Intelligent Autonomous Vehicles
- (2009)** Chair session at International Conference on Robotics and Biomimetics
- (2010-present)** He is member of the IEEE, of the IEEE Robotics and Automation Society, and of the IEEE Control System Society
- (2010-present)** He is member of Società Italiana Docenti e Ricercatori in Automatica.
- (Apr.13- Mar.16)** Secretary of Consiglio Didattico di Ingegneria Informatica
- (Apr.13- Mar.16)** Web Delegate for the Consiglio Didattico di Ingegneria Informatica.
- (Jun.16-present)** Member of the Web Commission for the Department of Information Engineering, Electrical Engineering and Applied Mathematics
- (Febr.16-present)** Member of the Project Commission for the Department of Information Engineering, Electrical Engineering and Applied Mathematics.

(2007-present) Advisor of several master theses about control and coordination of multi-robot systems, control of robotic manipulators, force control of cooperative robotic manipulators.

TEACHING ACTIVITIES

- (2011-present).** He has been teaching classes for Master Students in Engineering programs related to Robotics (6CFU-60 hours-30 students)
- (2013-2014)** He taught Fundamentals of Distributed Control of Multi-robot systems” for “Dottorato in Ingegneria dell’Informazione”, Università degli Studi di Salerno. (1CFU-8 hours-8 students)
- (2012-2013)** He taught Fundamentals of Multi-robot systems control” for “Dottorato in Ingegneria dell’Informazione”, Università degli Studi di Salerno. (1CFU-10 hours-10 students)
- (2012-2013)** He taught Fundamentals of Multi-robot systems control” for “Dottorato in Ingegneria dell’Informazione”, Università degli Studi di Salerno. (1CFU-10 hours-8 students)
- (2011-2016)** He has been teaching classes for BC in Engineering programs related to Control System Theory (6CFU-60 hours-100 students)
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PARTICIPATION IN EDITORIAL BOARDS OF RECOGNIZED: JOURNALS, COLLECTIONS OF BOOKS, ENCYCLOPEDIAS AND TREATISES

- (2016-present)** Associate Editor of SAGE- International Journal of Advanced Robotic Systems.
- (2016-present)** Member of the National Program Committee of Workshop on Discrete Event Systems (WODES), Sorrento, Italy, 2018.
- (2016-2017)** Associate Editor of 12th Conference on Automation Science and Engineering, and International Symposium on Assembly and Manufacturing (CASE/ICAM).
- (2016-2017)** Member of the Program Committee of IEEE International Conference on Networking, Sensing and Control (ICNSC).
- (2015-present)** Review Editor of Frontiers Journal-Robotics AI/Robotic Control Systems.
- (2014-2016)** Member of the Program Committee of IEEE International Conference on Information and Automation (ICIA).

- (2013-present)** Associate Editor of IEEE International Conference in Robotics and Automation (ICRA).
- (2013-present)** Member of the Program Committee of IEEE Robotics and Biomimetics (ROBIO).
- (2013-present)** Member of the Program Committee of International Conference on Intelligent Autonomous Systems (IAS).

SUPERVISOR ACTIVITY

- (Nov.17-present)** Supervisor of Dr. Martina Lippi in her Ph.D program funded by the Italian Ministry of University and Research under proposal submission. Decree n. 3746, 29 Dec, 2017. Score of 100/100 (Grant N.2 - DOT1328209 in the [list](#)).
- (Jul.17-Oct.17)** Supervisor of Dr. Martina Lippi within the research grant “Distributed Control of cooperative manipulators”.
- (May.15-Aug.15)** Supervisor of Dr. Amine Harrachi from Ecole Nationale Supérieure d'Ingénieurs de Caen - ENSICAEN
- (2011-present)** Supervisor of more than 10 master thesis and Erasmus Thesis held abroad in the field of robotics and control at the University of Salerno and that result in several scientific papers.

AWARDS AND RECOGNITION

- (2018)** ICRA Conference Editorial Board Best Associate Editor Award for IEEE International Conference on Robotics and Automation Conference 2018
- (2017)** Elevation to the grade of IEEE Senior Member for professional recognition for technical and professional excellence.
- (2015)** Finalist for the Best Paper Award at the " IEEE International Conference on Information and Automation (ICIA)", August, Lijiang, China, 2015 with the paper:
A. Marino, F. Pierri, P. Chiacchio, S. Chiaverini, “Distributed Fault Detection and Accommodation for a Class of Discrete-time linear systems”
- (2009)** Finalist for the Best Paper Award at the "IEEE International Conference on Robotics and Biomimetics (ROBIO)", Guilin, China, December, 2009 with the paper:

PUBLICATIONS

Journal Papers

- Marino, Alessandro; Pierri, Francesco. **Distributed cooperative manipulation of unknown object without explicit communication and unknown number of robots**. ELSEVIER ROBOTICS AND AUTONOMOUS SYSTEMS. In press: doi:/10.1016/j.robot.2018.02.007
- Marino, Alessandro. **Task-oriented distributed adaptive control of networked cooperative manipulators performing both pure coordination and interacting tasks**. IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY. In press. DOI: 10.1109/TCST.2017.2720673.
- Marino, Alessandro; Pierri, Francesco; Arrichiello, Filippo. **Distributed fault detection isolation and accommodation for networked discrete-time linear systems**. IEEE TRANSACTIONS ON AUTOMATIC CONTROL. vol.PP, no.99, pp.1-1 doi: 10.1109/TAC.2017.2694556.
- Arrichiello, Filippo; Marino, Alessandro; Pierri, Francesco. **Distributed Fault Tolerant Control for Networked Robots in the Presence of Recoverable/Unrecoverable Faults and Reactive Behaviors**. Frontiers Journal. and AI, Vol. 4, Pag. 1-12, ISSN: 2296-9144
- Marino, Alessandro. **Task-oriented distributed adaptive control of networked cooperative manipulators performing both pure coordination and interacting tasks**. IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY. (**under review- Reject and Resubmit**)
- Arrichiello, Filippo; Marino, Alessandro; Pierri, Francesco (2015). **Observer-Based Decentralized Fault Detection and Isolation Strategy for Networked Multirobot Systems**. IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY. Vol. 23. Pag.1465-1476 ISSN:1063-6536.
- Pasquale Cirillo; Andrea Cirillo; Giuseppe De Maria; Alessandro Marino; Ciro Natale; Salvatore Pirozzi (2017). **Optimal custom design of both symmetric and unsymmetrical hexapod robots for aeronautics applications**. ELSEVIER ROBOTICS AND COMPUTER INTEGRATED MANUFACTURING. Vol. 44. Pag.1-16 ISSN: 0736-5845
- Alessandro Marino; Gianluca Antonelli; A. Pedro Aguiar; António Pascoal; Stefano Chiaverini(2015). **A Decentralized Strategy for Multirobot Sampling/Patrolling: Theory and Experiments**. IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY. Vol. 23. Pag.313-322 ISSN:1063-6536.
- Arrichiello, Filippo; Marino, Alessandro; Pierri, Francesco (2015). **Observer-Based Decentralized Fault Detection and Isolation Strategy for Networked Multirobot Systems**. IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY. Vol. 23. Pag.1465-1476 ISSN:1063-6536.
- Marino, Alessandro; Antonelli, Gianluca(2015). **Experiments on sampling/patrolling with two Autonomous Underwater Vehicles**. ROBOTICS AND AUTONOMOUS SYSTEMS. Vol. 67. Pag.61-71 ISSN:0921-8890.
- Gianluca Antonelli; Filippo Arrichiello; Fabrizio Caccavale; Alessandro Marino(2014). **Decentralized time-varying formation control for multi-robot systems**. THE INTERNATIONAL JOURNAL OF ROBOTICS RESEARCH. Vol. 33. Pag.1029-1043 ISSN:0278-3649.
- Francesco Basile; Fabrizio Caccavale; Pasquale Chiacchio; Jolanda Coppola; Alessandro Marino; Diego Gerbasio(2014). **Automated synthesis of hybrid Petri net models for**

- robotic cells in the aircraft industry.** CONTROL ENGINEERING PRACTICE. Vol. 31. Pag.35-49 ISSN:0967-0661.
- Alessandro Marino; Lynne E. Parker; Gianluca Antonelli; Fabrizio Caccavale(2013). **A Decentralized Architecture for Multi-Robot Systems Based on the Null-Space-Behavioral Control with Application to Multi-Robot Border Patrolling.** JOURNAL OF INTELLIGENT & ROBOTIC SYSTEMS. Pag.1-22 ISSN:0921-0296.
 - Francesco Basile; Fabrizio Caccavale; Pasquale Chiacchio; Jolanda Coppola; Alessandro Marino(2013). **A decentralized kinematic control architecture for collaborative and cooperative multi-arm systems.** MECHATRONICS. Pag.1-13 ISSN:0957-4158.
 - Fabrizio Caccavale; Alessandro Marino; Giuseppe Muscio; Francesco Pierri(2013). **Discrete-Time Framework for Fault Diagnosis in Robotic Manipulators.** IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY. Vol. 21. Pag.1858-1873 ISSN:1063-6536.
 - Gianluca Antonelli; Filippo Arrichiello; Fabrizio Caccavale; Alessandro Marino(2013). **A decentralized controller-observer scheme for multi-agent weighted centroid tracking.** IEEE TRANSACTIONS ON AUTOMATIC CONTROL. Vol. 58. Pag.1310-1316 ISSN:0018-9286.
 - G. Antonelli; C. Curatella;A. Marino(2011). **Constrained motion planning for open-chain industrial robots..** ROBOTICA. Vol. 29. Pag.403-420 ISSN:0263-5747.
 - G. Antonelli;F. Caccavale;F. Grossi;A. Marino(2010). **A non-iterative and effective procedure for simultaneous odometry and camera calibration for a differential drive mobile robot based on the singular value decomposition.** INTELLIGENT SERVICE ROBOTICS. Vol. 3. Pag.163-173 ISSN:1861-2776.
 - Fabrizio Caccavale; Pasquale Chiacchio; Alessandro Marino; Luigi Villani (2008). **Six-DOF Impedance Control of Dual-Arm Cooperative Manipulators.** IEEE/ASME TRANSACTIONS ON MECHATRONICS. Vol. 13. Pag.576-586 ISSN:1083-4435.
 - Fabrizio Caccavale; Pasquale Chiacchio; Alessandro Marino; Luigi Villani (2008). **Experiments of impedance control for a dual-arm cooperative system.** AUTOMAZIONE E STRUMENTAZIONE. Vol. LVI (3). Pag.82-89 ISSN:0005-1284.

Book chapters

- Gianluca Antonelli; Filippo Arrichiello; Giuseppe Casalino; Stefano Chiaverini; Alessandro Marino; Enrico Simetti and Sandro Torelli(2014). **Harbour Protection Strategies with Multiple Autonomous Marine Vehicles.** In Jan Hodicky **Modelling and Simulation for Autonomous Systems** Pag.241-261, Springer. ISBN:9783319138220
- Francesco Pierri; Alessandro Marino; Giuseppe Muscio; Fabrizio Caccavale(2011). **Research activities at the University of Basilicata.** In Fabrizio Caccavale, Pasquale Chiacchio **Proceedings of the 1st PRISMA Workshop** Pag.109-131 , CUES. ISBN:9788895028811
- Fabrizio Caccavale; Pasquale Chiacchio; Agostino De Santis; Alessandro Marino; Luigi Villani (2007). **An Experimental Investigation on Impedance Control for Dual-Arm Cooperative Systems.** In Institute of Electrical and Electronics Engineers (IEEE) **2007 IEEE/ASME International Conference on Advanced Intelligent Mechatronics** Pag.180-185 , Institute of Electrical and Electronics Engineers (IEEE). ISBN:9781424412631

Conference Proceedings

- Lippi, Martina; Marino, Alessandro (2018). **Cooperative object transportation by multiple ground and aerial vehicles: modeling and planning.** Accepted to 2018 IEEE International Conference on Automation and Robotics.

- Andrea Gasparri, Alessandro Marino (2017). **A k-Hop Graph-Based Observer for Large-Scale Networked Systems**. 2017 56th IEEE Conference on Decision and Control, Melbourne, Australia
- Alessandro Marino (2017). **A decentralized robust adaptive control for tightly connected networked Lagrangian systems**. 2017 56th IEEE Conference on Decision and Control, Melbourne, Australia
- Pasquale Cirillo, Alessandro Marino, Ciro Natale, Emiliano Di Marino, Pasquale Chiacchio, Giuseppe De Maria. **A low-cost and flexible solution for one-shot cooperative robotic drilling of aeronautic stack materials**. 2017 IFAC 2017 World Congress, Toulouse, France
- Alessandro Marino, Giuseppe Muscio, Francesco Pierri. **Distributed cooperative object parameter estimation and manipulation without explicit communication**. 2017 International Conference on Robotics and Automation (ICRA), Singapore, May 29-June 3 (Accepted).
- Marino Alessandro, Pierri Francesco (2016). **Discrete-time distributed state feedback control for multi-robot systems**. In: Proceedings – IEEE International Conference on Robotics and Automation, p.5350-5355, Institute of Electrical and Electronics Engineers Inc., ISBN: 9781467380263, Stockholm Waterfront Congress Center, Sweden, 2016, doi: 10.1109/ICRA.2016.7487746
- Marino Alessandro, Cirillo Pasquale, Natale Ciro, Chiacchio Pasquale, Pirozzi Salvatore (2016). **A general low-cost and flexible architecture for robotized drilling in aircraft assembly lines**. In: 2016 International Symposium on Power Electronics, Electrical Drives, Automation and Motion, p. 1401-1408, Capri, Italy, 22-24 June 2016.
- Marino Alessandro; Chiacchio Pasquale (2016). **Task-oriented decentralized adaptive control of cooperative manipulators**. In: IEEE International Conference on Robotics and Biomimetics (ROBIO) Qingdao, China, December 3-7, 2016.
- Marino, Alessandro; Chiacchio, Pasquale (2015). **Distributed fault detection and accommodation for a class of discrete-time linear systems**. In: Distributed fault detection and accommodation for a class of discrete-time linear systems Lijiang, China August 8-10, IEEE Pag.469-474
- Marino, Alessandro; Pierri, Francesco (2015). **Discrete-time distributed control and fault diagnosis for a class of linear systems**. In: 2015 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) Amburgo September 28 - October 2 IEEE Pag.2974-2979
- Filippo Arrichiello; Alessandro Marino; Francesco Pierri(2014). **Distributed fault detection and recovery for networked robots**. In: IEEE/RSJ International Conference on Intelligent Robots and Systems Chicago September IEEE Pag.3734-3739 ISBN:9781479969333
- Filippo Arrichiello; Alessandro Marino; Francesco Pierri(2013). **A decentralized fault detection and isolation strategy for networked robots**. In: International Conference on Advanced Robotics Montevideo, Uruguay November IEEE PRESS Pag.1-6 ISBN:9789974819481
- Gianluca Antonelli; Filippo Arrichiello; Fabrizio Caccavale; Alessandro Marino (2013). **Decentralized centroid and formation control for multi-robot systems**. In: 2013 International Conference on Robotics and Automation (ICRA) Karlsruhe May IEEE PRESS Pag.3511-3516 ISBN:9781467356411
- Filippo Arrichiello; Alessandro Marino; A. Meddahi(2013). **A decentralized observer for a general class of Lipschitz systems**. In: 2013 IEEE International Conference on Information and Automation (ICIA) Yinchuan, China August IEEE Press Pag.362-367 ISBN:9781479913343
- Alessandro Marino; Gianluca Antonelli (2013). **Experimental results of coordinated sampling/patrolling by autonomous underwater vehicles**. In: IEEE International

Conference on Robotics and Automation Karlsruhe May IEEE Computer Society Pag.4141-4146 ISBN:9781467356411

- Andrea Munafò; Vincenzo Calabrò; Alessio Turetta; Andrea Caffaz; Alessandro Marino; Andrea Caiti Giuseppe Casalino; Giovanni Indiveri; Gianluca Antonelli(2012). **Underwater robot networks: communication and cooperation**. In: Proceedings IEEE Workshop on Underwater Communications Ucomms12 Sestri Levante, Italy September Pag.1-7
- Gianluca Antonelli ; Filippo Arrichiello; Fabrizio Caccavale ; Alessandro Marino(2012). **A Decentralized Observer-Controller Scheme for Centroid and Formation Control with Bounded Control Input**. In: 3rd IFAC Workshop on Distributed Estimation and Control in Networked Systems (2012) Santa Barbara, CA, USA September IFAC Pag.252-257 ISBN:9783902823229
- Alessandro Marino; Gianluca Antonelli; A. Pedro Aguiar; Antonio Pascoal(2012). **A new approach to multi-robot harbour patrolling: Theory and experiments**. In: 2012 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) Vilamoura-Algarve, Portugal October IEEE Press Pag.1760-1765 ISBN:9781467317375
- Antonelli, Gianluca; Chiaverini, Stefano; Marino, Alessandro(2012). **A Coordination Strategy for Multi-Robot Sampling of Dynamic fields**. In: 2012 International Conference on Robotics and Automation (ICRA) St. Paul, USA May IEEE Press Pag.1113-1118 ISBN:9781467314046
- Gianluca Antonelli; Filippo Arrichiello; Fabrizio Caccavale; Alessandro Marino(2011). **A decentralized controller-observer scheme for multi-robot weighted centroid tracking**. In: 2011 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) San Francisco December IEEE Press Pag.2778-2783 ISBN:9781612844541
- Gianluca Antonelli; Stefano Chiaverini; Alessandro Marino(2011). **Decentralized Deployment with Obstacle Avoidance for AUVs**. In: The 18th IFAC World Congress, Milano 28 August-2 Settembre IFAC International Federation of Automatic Control Vol.18, Pag.12807-12812 ISBN:9783902661937
- Caccavale F.; Marino A.; Pierri, F.(2010). **Sensor fault diagnosis for manipulators performing interaction tasks**. In: IEEE International Symposium on Industrial Electronics (ISIE), 2010 IEEE Pag.2121-2126 ISBN:9781424463909
- G. Antonelli;F. Caccavale;F. Grossi;A. Marino(2010). **Simultaneous Calibration of Odometry and Camera for a Differential Drive Mobile Robot**. In: Proceedings 2010 IEEE International Conference on Robotics and Automation 2010 IEEE Pag.5417-5422 ISBN:9781424450404
- Antonelli G; A. Marino(2010). **Smooth 3-Dimensional Path Generation with Guaranteed Maximum Distance from Via-Points**. In: The 7th IFAC Symposium on Intelligent Autonomous Vehicles Lecce IFAC Vol.7, Pag.1-6 ISBN:9783902661876
- G. Antonelli; S. Chiaverini; C. Curatella; A. Marino(2009). **Constrained motion planning for industrial robots**. In: IEEE International Conference on Automation and Logistics Shenyang August IEEE PRESS Pag.1934-1939 ISBN:9781424447954
- Marino;F. Caccavale;L. E. Parker;G. Antonelli(2009). **Fuzzy behavioral control for multi-robot border patrol**. In: Proceedings of the 2009 17th Mediterranean Conference on Control and Automation Thessaloniki 2009 Washington, DC, USA IEEE Computer Society Pag.246-251 ISBN:9781424446858
- Marino; L. Parker; G. Antonelli; F. Caccavale(2009). **Behavioral control for multi-robot perimeter patrol: A Finite State Automata approach**. In: IEEE International Conference on Robotics and Automation, 2009. ICRA '09. Kobe IEEE PRESS Pag.831-836 ISBN:9781424427895
- Marino; L. E. Parker; G. Antonelli; F. Caccavale; S. Chiaverini;(2009). **A fault-tolerant modular control approach to multi-robot perimeter patrol**. In: 2009 IEEE International

Conference on Robotics and Biomimetics (ROBIO) Guilin, China December IEEE PRESS
Pag.735-740 ISBN:9781424447749

- Francesco Basile; Fabrizio Caccavale; Pasquale Chiacchio; Alessandro Marino; Luigi Villani (2006). **Experiments of Impedance Control for a Dual-Arm Cooperative System**. Roma, Italia

Posters

- Alessandro Marino, Filippo Arrichiello, Fancesco Pieri (2015). **Distributed and fault tolerant control for a class of discrete time linear systems**. In: 2015 Robotics: Science and Systems Roma Luglio 13-17 Pag.1-3 ISBN:978-0-9923747-1-6