

# Curriculum Vitae

**Dimos V. Dimarogonas, PhD**

**PhD in Automatic Control & Robotics, NTUA, 2006**

**Diploma in Electrical & Computer Engineering, NTUA, 2001**

## **Office Address**

School of Electrical Engineering  
Automatic Control  
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**Web:** <http://www.s3.kth.se/~dimos/>

**Date of Birth:** June 17<sup>th</sup>, 1978, Athens, GREECE

**Marital Status:** Single

**Citizenship:** Greek

## **EDUCATION**

PhD in Mechanical Engineering: **National Technical University of Athens**

Athens, GREECE (3/2002-12/2006)

Dissertation Title: *“Development of Decentralized Hybrid Control Methodologies with Application to the Collision Avoidance Problem”*

Advisor: Prof. Kostas Kyriakopoulos

Eng. Diploma: **National Technical University of Athens** Athens, GREECE

Diploma in Electrical and Computer Engineering, Telecommunications Section  
(9/1996-9/2001)

Dipl. Thesis Title: *“Max-Plus Control of Discrete-Event Dynamical Systems”*

Advisor: Prof. Petros Maragos

GPA: 8.15/10.0.

## RESEARCH INTERESTS

Multi-Agent Systems, Robot Navigation, Networked Control, Event-Based Control, Air Traffic Control, Hybrid Systems and Control.

## PROFESSIONAL EXPERIENCE

### **Automatic Control Lab, School of Electrical Eng., Royal Inst. Of Technology (KTH)**

Stockholm, SWEDEN

10/2010-:

*Assistant Professor (Swedish: Forskarassistent)*

### **Greek Army (Στρατός Ελλάδας), fulfillment of compulsory military service**

Greece

5/2010-9/2010

### **Laboratory for Information and Decision Systems, Massachusetts Inst. Of Technology (MIT)**

Cambridge, MA, USA

2/2009-3/2010:

*Post Doctoral Research Associate*

Basic research field: Networked and multi-agent control, cooperative vehicle routing, air traffic control. Research on event and self-triggered control of distributed networked systems, bioinspired control of robotic swarms, complexity issues in high density decentralized air traffic control systems.

Research Supervisor: Professor Emilio Frazzoli.

2/2009-3/2010:

*Research Engineer*

Research on complexity and fundamental limits of cooperative vehicle routing, with application to air traffic control systems, under the NASA IDEAS contract.

### **Automatic Control Lab, School of Electrical Eng., Royal Inst. Of Technology (KTH)**

Stockholm, SWEDEN

5/2007-2/2009:

*Post Doctoral Research Associate*

Basic research field: multi-agent coordination, networked control. Research on network connectivity control and quantized information exchange between the agents, distributed control of sensor networks and multi-robot systems, formation stability of multi-agent systems.

Research Supervisor: Professor Karl Henrik Johansson.

5/2007-2/2009:

*Research Engineer*

Research on cooperative control of multi-agents systems with application to multi-robot cooperative navigation, guard and search and on distributed control of mobile sensor networks conducted under the TAIS-AURES contract, the HYCON NoE and the KTH ACCESS Linnaeus Center.

9/2007-2/2009:

*Project Leader*

Project Leader of the ACCESS Linnaeus Center Project on Wireless Sensing and Actuation. Research on coding, control and estimation for wireless sensor and actuator networks.

**Control Sys. Lab., Mech. Eng. Dept., National Tech. Univ. of Athens**

Athens, GREECE

3/2002-12/2006:

*PhD Candidate*

Research on decentralized navigation of multiple sphere world agents using Navigation Functions, distributed cooperative control and collision avoidance, state agreement for nonholonomic agents, flocking motion, stability of switched stochastic systems.

Advisor: Professor Kostas J. Kyriakopoulos.

3/2002-12/2004:

*Research Engineer*

Conducted research on development of control methodologies for decentralized navigation and collision avoidance for multi-agent systems under the EU HYBRIDGE contract(IST-2001-32460).

1/2005-4/2007

*Research Engineer*

Conducted research on development of control methodologies for decentralized cooperative control for multiple micro-robotic agents under the EU ISWARM contract (IST-2004-507006).

**Control Group, Univ. of Cambridge**

Cambridge, UK

11/2002

*Visiting Graduate Student*

Invited by Professor John Lygeros. Conducted research on decentralized conflict resolution for Air Traffic Management.

**DCSL Lab., School of Aerospace Eng., Georgia Inst.of Technology**

Atlanta, Georgia

10/2005

*Visiting Graduate Student*

Invited by Professor Panagiotis Tsiotras. Conducted research on development of control methodologies for decentralized cooperative attitude control for multiple rigid bodies.

## **SEMINARS**

June 2003: DISC Summer School on Modeling and Control of Hybrid Systems, Veldhoven, the Netherlands.

September 2004: HYBRIDGE Summer School on Hybrid Systems, University of Patras, Greece.

## **ACTIVITIES**

### **THESIS' SUPERVISION**

As Assistant Professor at KTH:

MS Thesis:

Georg Seyboth: "Event-based Control for Multi-Agent Systems", School of Electrical Engineering, Royal Institute of Technology, Sweden, 2010. With University of Stuttgart.

Joel Rundgren: "Modelling and Control of an SMT Robot", School of Electrical Engineering, Royal Institute of Technology, Sweden, 2011.

As external collaborator at NTUA: Co-supervisor of two graduate PhD students. Supervised the thesis of two diploma M.E. students.

As Postdoc at KTH: Supervisor of two Master Theses:

Pedro Teixeira, "Event-Based Coordination of Multi-Agent Systems", School of Electrical Engineering, Royal Institute of Technology, Sweden, 2008. With Universidade do Porto.

Fotios Katsilieris, "Search and Secure Using Mobile Robots", School of Electrical Engineering, Royal Institute of Technology, Sweden, 2008.

As Postdoc at MIT: Co-supervisor of a graduate PhD student.

## **REVIEWING**

Reviewed papers for the following journal/conferences: IEEE International Conference on Robotics and Automation, IEEE Int. Conf. on Intelligent Robots and Systems, American Control Conference, IEEE Conference on Decision and Control, IEEE Transactions on Automatic Control, IEEE Transactions on Robotics, IEEE Transactions on Autom.Science in Engineering, Automatica, International Journal on Systems Science, Robotics and Autonomous Systems, Mediterranean Control Conference, Hybrid Systems: Computation & Control Conference, International Journal of Control, International Journal of Robust and Nonlinear Control, Asian Journal of Control, IEEE Robotics Magazine, European Control Conference.

## COMMITTEE SERVICING

Member of the International Program Committee for the 3rd International Workshop on Wireless Sensor, Actuator and Robot Networks (WiSARN), Shanghai, China, April 2011, in conjunction with IEEE INFOCOM 2011.

Member of the International Program Committee for the 11th Conference on Mobile Robots and Competitions, ROBOTICA 2011 Lisbon, Portugal, April 2011.

Member of the International Program Committee for the 6th annual IEEE Conference on Automation Science and Engineering (IEEE CASE), sponsored by the IEEE Robotics and Automation Society (RAS), August 2010 in Toronto, Ontario, Canada.

Member of the International Program Committee for the 1st International Workshop on Wireless Sensor, Actuator and Robot Networks (WiSARN), Montreal, Montreal, Canada, June 2010, in conjunction with IEEE WoWMoM 2010.

Member of the International Program Committee for the 10th Conference on Mobile Robots and Competitions, ROBOTICA 2010 Leiria, Portugal, March 2010.

Program Committee Chair for ACCESS 1<sup>st</sup> Industrial Workshop, Stockholm, Sweden, March 2008.

## TEACHING EXPERIENCE

**Lecturer and Course Responsible:** EL3330 Networked and Multi-Agent Control Systems, School of Electrical Engineering, KTH ACCESS specialized graduate course, Spring 2011.

**Lecturer and Course Responsible:** EL2450 Hybrid and Embedded Control Systems, School of Electrical Engineering, KTH, undergraduate course, Spring 2011.

**Reading Group** on Secure and Reconfigurable Multiagent and Networked Control Systems, School of Electrical Engineering, KTH, Spring 2011.

**Teaching Assistant:** M.E. Department, NTUA Spring 2004, Spring 2005  
Assisted in teaching an undergraduate level course on *Digital Control Systems*.

**Teaching Assistant:** M.E. Department, NTUA Spring 2006  
Assisted in teaching a graduate level course on *Adaptive Control*.

**Teaching Assistant:** Department of Aeronautics and Astronautics, MIT Fall 2009  
Assisted in teaching a graduate level course on *Multi-Agent Systems*.

## AWARDS

2007 and 2008 KTH Linnaeus Center Award for best post-doctorial application, selected in the four winning candidates out of more than one hundred applications.

General Chair's Recognition Award for Interactive Papers for the paper *Event-triggered control for multi-agent systems*, by D. V. Dimarogonas and K. H. Johansson, presented at the IEEE CDC, Shanghai, China, 2009.

## **INVITED TALKS**

P7. “Bridging the gap between multi-agent navigation and networked control”, Department of Electrical Engineering and Information Technology, Institut für Systemtheorie und Regelungstechnik Universität Stuttgart, Stuttgart, Germany, November 2010.

P6. “Connectivity Maintenance Control Strategies in Multi-Robot Systems”, Department of Electrical Engineering and Information Technology, Technische Universität München, Munich, Germany, February 2009.

P5. “Decentralized Control Methods for Navigation of Multi-Agent Systems to Cooperative and Non-cooperative Equilibria”, CCRL-CoTeSys Central Robotics Laboratory Technische Universität München, Munich, Germany, July 2008.

P4. “Analysis of robot navigation schemes using Rantzer's dual Lyapunov theorem”, Delft Center for Systems and Control, Delft University of Technology, Delft, the Netherlands, May 2008.

P3. “Decentralized Control Methods for Navigation of Multi-Agent Systems”, Département d'Automatique de Grenoble and France and Inria Rhones Alpes, Grenoble, France, November 2007.

P2. “Decentralized Control Methods for Navigation of Multi-Agent Systems to Cooperative and Non-cooperative Equilibria”, Automatic Control Lab, School of Electrical Engineering, Royal Institute of Technology, Stockholm, Sweden, January 2007.

P1. “Decentralized Navigation Concepts for Multi-Agent Systems to Cooperative & Non-Cooperative Equilibria”, Dynamics and Control Systems Lab, School of Aerospace Engineering, Georgia Institute of Technology, Atlanta, Georgia, USA, October 2005.

## **ACCEPTED PUBLICATIONS (in reversed chronological order)**

### **Journal Papers**

J12. Giannis Roussos, Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "3D Navigation and Collision Avoidance for Nonholonomic Aircraft-like Vehicles", *International Journal of Adaptive Control and Signal Processing*, Vol. 24, No. 10, pp. 900-920, September 2010.

J11. Dimos V. Dimarogonas and Karl H. Johansson, "Stability analysis for multi-agent systems using the incidence matrix: quantized communication and formation control", *Automatica*, Vol. 46, No. 4, pp. 695-700, April 2010.

J10. Dimos V. Dimarogonas and Karl H. Johansson, "Bounded Control of Network Connectivity in Multi-Agent Systems", *IET Control Theory & Applications*, Vol. 4, No. 8, pp. 1330-1338, August 2010.

J9. Tove Gustavi, Dimos V. Dimarogonas, Magnus Egerstedt and Xiaoming Hu, "Sufficient conditions for connectivity maintenance and rendezvous in leader-follower networks", *Automatica*, Vol. 46, No. 1, pp. 133-139, January 2010.

J8. Dimos V. Dimarogonas, Panagiotis Tsiotras and Kostas J. Kyriakopoulos, "Leader-Follower Cooperative Attitude Control of Multiple Rigid Bodies", *Systems and Control Letters*, Vol. 58, No. 6, pp. 429-435, June 2009.

J7. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Inverse agreement protocols with application to distributed multi-agent dispersion", *IEEE Transactions on Automatic Control*, Vol. 54, No. 3, pp. 657-663, March 2009.

J6. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Connectedness Preserving Distributed Swarm Aggregation for Multiple Kinematic Robots", *IEEE Transactions on Robotics*, Vol. 24, No. 5, pp. 1213-1223, October 2008.

J5. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "A connection between formation infeasibility and velocity alignment in kinematic multi-agent systems", *Automatica*, Vol. 44, No. 10, pp. 2648-2654, October 2008.

J4. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "On the rendezvous problem for multiple nonholonomic agents", *IEEE Transactions on Automatic Control*, Vol. 52, No. 5, pp. 916-922, May 2007.

J3. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Decentralized navigation functions for multiple agents with limited sensing capabilities", *Journal of Intelligent and Robotic Systems*, Vol. 48, No. 3, pp. 411-433, March 2007.

J2. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "A Feedback Control Scheme for Multiple Independent Dynamic Non-point Agents", *International Journal of Control*, Vol. 79, No. 12, pp. 1613-1623, December 2006.

J1. Dimos V. Dimarogonas, Savvas G. Loizou, Kostas J. Kyriakopoulos and Michael M. Zavlanos, "A Feedback Stabilization and Collision Avoidance Scheme for Multiple Independent Non-point Agents", *Automatica*, Vol. 42, No. 2, pp. 229-243, February 2006.

### **Book Chapters**

B1. Dimos V. Dimarogonas, Savvas G. Loizou and Kostas J. Kyriakopoulos, "Multirobot Navigation Functions II: Towards Decentralization", in *Stochastic Hybrid Systems: Theory and Safety Critical Applications*, H.A.P Blom and J. Lygeros (eds.), Springer Lecture Notes in Control and Information Sciences, Vol. 337, 2006.

### **Conference Papers**

C47. Georg S. Seyboth, Dimos V. Dimarogonas and Karl H. Johansson, Control of Multi-Agent Systems via Event-Based Communication, 18th IFAC World Congress, Milano, Italy, August 2011, to appear.

C46. Alina Eqtami, Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, Event-Triggered Strategies for Decentralized Model Predictive Controllers, 18th IFAC World Congress, Milano, Italy, August 2011, to appear.

C45. Dimos V. Dimarogonas, Emilio Frazzoli and Karl H. Johansson, "Distributed Self-Triggered Control for Multi-Agent Systems", 49th IEEE Conference on Decision and Control, Atlanta, GA, USA, pp. 6716-6721, December 2010.

C44. Dimos V. Dimarogonas and Emilio Frazzoli, "Analysis of Decentralized Potential Field Based Multi-Agent Navigation via Primal-Dual Lyapunov Theory", 49th IEEE Conference on Decision and Control, Atlanta, GA, USA, pp. 1215-1220, December 2010.

C43. Pedro Vaz Texeira, Dimos V. Dimarogonas, Karl H. Johansson and Joao Borges de Sousa, "Event-based motion coordination of multiple underwater vehicles under disturbances", Proceedings of the 2010 IEEE OCEANS, Sydney, Australia, May 2010.

C42. Alina Eqtami, Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Event-triggered Control for Discrete-Time Systems", Proceedings of the 2010 American Control Conference, Baltimore, MD, USA, pp. 4719-4724, July 2010.

C41. Pedro Vaz Texeira, Dimos V. Dimarogonas, Karl H. Johansson and Joao Borges de Sousa, "Multi-agent Coordination with Event-Based Communication", Proceedings of the 2010 American Control Conference, Baltimore, MD, USA, pp. 824-829, July 2010.

C40. Kevin Spieser, Dimos V. Dimarogonas and Emilio Frazzoli, "On the Transfer Time Complexity of Cooperative Vehicle Routing", Proceedings of the 2010 American Control Conference, Baltimore, MD, USA, pp. 3039-3044, July 2010.



C39. Dimos V. Dimarogonas and Emilio Frazzoli, "Distributed Event-Triggered Strategies for Multi-Agent Systems", Proceedings of the 47<sup>th</sup> Annual Allerton Conference on Communications, Control and Computing, Monticello, IL, USA, 2009.

C38. Dimos V. Dimarogonas and Karl H. Johansson, "Event-Triggered Control for Multi-Agent Systems", Proceedings of the 48th IEEE Conference on Decision and Control, Shanghai, China, pp. 7131-7136, December 2009.

C37. Alexandre Seuret, Dimos V. Dimarogonas and Karl H. Johansson, "Consensus of Double Integrator Multi-agents under Communication Delay", Proceedings of the 8<sup>th</sup> IFAC Workshop on Time Delay Systems, Sinaia, Romania, 2009.

C36. Tove Gustavi, Dimos V. Dimarogonas, Magnus Egerstedt and Xiaoming Hu, "On the Number of Leaders Needed to Ensure Network Connectivity in Arbitrary Dimensions", Proceedings of the 17<sup>th</sup> IEEE Mediterranean Conference on Control and Automation, Thessaloniki, Greece, pp. 98-103, June 2009.

C35. Dimos V. Dimarogonas and Karl H. Johansson, "Event-Triggered Cooperative Control", Proceedings of the 2009 European Control Conference, Budapest, Hungary, 2009.

C34. Giannis Roussos, Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Distributed 3D Navigation and Collision Avoidance Nonholonomic Aircraft-like Vehicles", Proceedings of the 2009 European Control Conference, Budapest, Hungary, 2009.

C33. Dimos V. Dimarogonas and Karl H. Johansson, "Further Results on the Stability of Distance-based Multi-Robot Formations", Proceedings of the 2009 American Control Conference, St. Louis, MO, USA, pp. 2972-2977, June 2009.

C32. Alexandre Seuret, Dimos V. Dimarogonas and Karl H. Johansson, "Consensus under Communication Delays", Proceedings of the 47th IEEE Conference on Decision and Control, Cancun, Mexico, pp. 4922-4927, December 2008.

C31. Dimos V. Dimarogonas, Tove Gustavi, Magnus Egerstedt and Xiaoming Hu, "On the Number of Leaders Needed to Ensure Network Connectivity", Proceedings of the 47th IEEE Conference on Decision and Control, Cancun, Mexico, pp. 1797-1802, December 2008.

C30. Dimos V. Dimarogonas and Karl H. Johansson, "On the Stability of Distance-based Formation Control", Proceedings of the 47th IEEE Conference on Decision and Control, Cancun, Mexico, pp. 1200-1205, December 2008.

C29. Dimos V. Dimarogonas and Karl H. Johansson, "Analysis of Robot Navigation Schemes Using Rantzer's Dual Lyapunov Theorem", Proceedings of the 2008 American Control Conference, Seattle, WA, USA, pp. 201-206, June 2008.

C28. Dimos V. Dimarogonas, Panagiotis Tsiotras and Kostas J. Kyriakopoulos, "Leader-Follower Cooperative Attitude Control of Multiple Rigid Bodies", Proceedings of the 2008 American Control Conference, Seattle, WA, USA, pp. 801-806, June 2008.

C27. Dimos V. Dimarogonas and Karl H. Johansson, "Quantized Agreement under Time-varying Communication Topology", Proceedings of the 2008 American Control Conference, Seattle, WA, USA, pp. 4376-4381, June 2008.

C26. Giannis Roussos, Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "3D Navigation and Collision Avoidance for a Non-Holonomic Vehicle", Proceedings of the 2008 American Control Conference, Seattle, WA, USA, pp. 3512-3517, June 2008.

C25. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Inverse Agreement Algorithms with Application to Swarm Dispersion for Multiple Nonholonomic Agents", Proceedings of the 2008 IEEE International Conference on Robotics and Automation, Pasadena, CA, USA, pp. 1973-1978, May 2008.

C24. Dimos V. Dimarogonas and Karl H. Johansson, "Decentralized Connectivity Maintenance in Mobile Networks with Bounded Inputs", Proceedings of the 2008 IEEE International Conference on Robotics and Automation, Pasadena, CA, USA, pp. 1507-1512, May 2008.

C23. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "An Inverse Agreement Control Strategy with Application to Swarm Dispersion", Proceedings of the 46th IEEE Conference on Decision and Control, New Orleans, LA, USA, pp. 6148-6153, December 2007.

C22. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Further Results on Formation Infeasibility and Velocity Alignment", Proceedings of the 46th IEEE Conference on Decision and Control, New Orleans, LA, USA, pp. 1447-1452, December 2007.

C21. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Connectivity Preserving Distributed Swarm Aggregation for Multiple Kinematic Agents", Proceedings of the 46th IEEE Conference on Decision and Control, New Orleans, LA, USA, pp. 2913-2918, December 2007.

C20. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Decentralized Swarm Aggregation with Static Communication Links", Proceedings of the first International Conference on Robot Communication and Coordination (ROBOCOMM 2007), Athens, Greece, October 2007.

C19. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "An Application of Rantzer's Dual Lyapunov Theorem to Decentralized Navigation", Proceedings of the 15<sup>th</sup> Mediterranean Conference on Control and Automation, Athens, Greece, June 2007.

C18. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "An Application of Rantzer's Dual Lyapunov Theorem to Decentralized Formation Stabilization", Proceedings of the 2007 European Control Conference, Kos, Greece, pp. 882-888, July 2007.

C17. Grigoris Lionis, Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Closed Loop Navigation for Multiple Micro Robots", Proceedings of the 2007 European Control Conference, Kos, Greece, pp. 1471-1476, July 2007.

C16. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "An Improved Result for the Stability of Interconnected Systems based on a New Gersgorin-type Criterion", Proceedings of the 2007 European Control Conference, Kos, Greece, pp. 535-539, July 2007.

C15. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Connectivity Preserving State Agreement for Multiple Unicycles ", Proceedings of the 2007 American Control Conference, New York City, NY, pp. 1179-1184, July 2007.

C14. Dimos V. Dimarogonas, Magnus Egerstedt and Kostas J. Kyriakopoulos, "A Leader-based Containment Control Strategy for Multiple Unicycles ", Proceedings of the 45th IEEE Conference on Decision and Control, San Diego, CA, Proceedings of the 45th IEEE Conference on Decision and Control, San Diego, CA, pp.5968-5973, December 2006.

C13. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "On the State Agreement Problem for Multiple Unicycles with Varying Communication Links", Proceedings of the 45th IEEE Conference on Decision and Control, San Diego, CA, pp.4283-4288, December 2006.

C12. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Distributed Cooperative Control and Collision Avoidance for Multiple Agents", Proceedings of the 45th IEEE Conference on Decision and Control, San Diego, CA, pp.721-726, December 2006.

C11. Dimos V. Dimarogonas, Panagiotis Tsiotras and Kostas J. Kyriakopoulos, "Laplacian Cooperative Attitude Control of Multiple Rigid Bodies ", Proceedings of the IEEE 2006 International Symposium on Intelligent Control, Munich, Germany, pp. 3064-3069, October 2006.

C10. Dimos V. Dimarogonas, Kostas J. Kyriakopoulos and Dimitris Theodorakatos "Totally Distributed Motion Control of Sphere World Multi-agent Systems Using Decentralized Navigation Functions", 2006 IEEE International Conference on Robotics and Automation, pp. 2430-2435, Orlando, FL, May 2006.

C9. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "A Connection Between Formation Control and Flocking Behavior in Nonholonomic Multiagent Systems", 2006 IEEE International Conference on Robotics and Automation, pp. 940-945, Orlando, FL, May 2006.

C8. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "On the State Agreement Problem for Multiple Unicycles", 2006 American Control Conference, pp. 2016-2021, Minneapolis, MN, June 2006.

C7. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Formation Control and Collision Avoidance for Multi-Agent Systems and a Connection between Formation Infeasibility and Flocking Behavior", Proceedings of the 44th IEEE Conference on Decision and Control, pp. 84-89, Seville, Spain, December 2005.

C6. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "A Feedback Stabilization and Collision Avoidance Scheme for Multiple Independent Nonholonomic Non-point Agents", Proceedings of the 2005 International Symposium on Intelligent Control & 13th Mediterranean Conference on Control and Automation, pp. 820-825, Limassol, Cyprus, June 2005.

C5. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Decentralized Motion Control of Multiple Agents with Double Integrator Dynamics", Proceedings of the 16th IFAC World Congress, Prague, Czech Republic, July 2005.

C4. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Decentralized Stabilization and Collision Avoidance of Multiple Air Vehicles with Limited Sensing Capabilities", Proceedings of the 2005 American Control Conference, pp. 4667-4772, Portland, OR, June 2005.

C3. Savvas G. Loizou, Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Decentralized Feedback Stabilization of Multiple Nonholonomic Agents", Proceedings of the 2004 IEEE International Conference on Robotics and Automation, pp. 3012-3017, New Orleans, LA, April 2004.

C2. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, "Lyapunov-like Stability of Switched Stochastic Systems", Proceedings of the 2004 American Control Conference, pp. 1868-1872, Boston, MA, June 2004.

C1. Dimos V. Dimarogonas, Michalis M. Zavlanos, Savvas G. Loizou and Kostas J. Kyriakopoulos, "Decentralized Motion Control of Multiple Holonomic Agents Under

Input Constraints”, Proceedings of the 42nd IEEE Conference on Decision and Control, pp. 3390-3395, Maui, Hawaii, December 2003.

## **WORKSHOP PARTICIPATIONS**

W2. F. Katsilieris, M. Lindhé, D. V. Dimarogonas, P. Ögren, and K. H. Johansson, *Demonstration of multi-robot search and secure*, Proceedings of the 2010 IEEE International Conference on Robotics and Automation, Workshop on Search and Pursuit/Evasion in the Physical World: Efficiency, Scalability, and Guarantees, Anchorage, AK, USA, 2010, to appear.

W1. Dimos V. Dimarogonas and Kostas J. Kyriakopoulos, “Connectedness Preserving Distributed Swarm Aggregation for Multiple Kinematic Agents”, 2007 International Conference on Robotics and Automation, Workshop on Collective Behaviors inspired by Biological and Biochemical Systems, Invited Paper, Rome, Italy, April 2007.