ANTÓNIO M. PASCOAL

SHORT CV

António M. Pascoal received the Licenciatura degree in Electrical Engineering from the Instituto Superior Técnico (IST), Lisbon, Portugal, in 1975 and the M.S. degree in Electrical Engineering and the Ph.D. degree in Control Science from the University of Minnesota, Minneapolis, Minnesota, USA in 1983 and 1987, respectively. His PhD research work was conducted under the supervision of Prof. Pramod Khargonekar.

From 1987-88 he was a Research Scientist with Integrated Systems Incorporated, Santa Clara, California, where he conducted research and development work in the areas of system modeling and identification and robust and adaptive control. Selected projects include: i) control of large space structures (under contract with the Air Force Office of Scientific Research/Directorate of Aerospace Science), ii) control and modeling of compliant robotic assembly tasks, iii) advanced servo-controls for lightweight robots (under contract with the U.S. Army), iv) real-time hardware implementation of adaptive controllers for flexible structures, and v) robust control of helicopter-mounted precision pointing devices (under contract with the U.S. Army Munitions and Chemical Command).

From 1988-93, he was an Assistant Professor with the Department of Electrical Engineering of the Instituto Superior Técnico (IST), where he is currently an Associate Professor of Control and Robotics. He has taught courses in the areas of Linear Control Systems, Digital Control, Robotics, Nonlinear Systems, Dynamical System Theory, Multivariable Robust Control, and Optimal Control Theory. From 1998-2000 he was the Coordinator of the Graduate Program in Electrical Engineering of IST. He has held visiting positions with the Department of Electrical Engineering and Computer Science of the University of Michigan, USA, the Department of Aeronautics and Astronautics, Naval Postgraduate School, Monterey, California, USA, and the National Institute of Oceanography, Goa, India. He has cooperated

extensively with researchers in those institutions in the areas of linear and nonlinear control theory, robust and gain-scheduled control, and navigation, guidance, and control of unmanned aircraft and ocean vehicles. From 1996-1998, as a Visiting Associate Professor with the Department of Aeronautics and Astronautics and the Department of Mechanical Engineering of the US Naval Postgraduate School of Monterey, California, he taught advanced courses in control and conducted research on the subjects of vehicle and mission control of air and sea robots.

In 1993 he joined the Institute for Systems and Robotics (ISR) of IST where he became the Coordinator of the Dynamical Systems and Ocean Robotics Laboratory. He is currently the coordinator of the Thematic Line Ocean Exploration and Exploitation of the Laboratory for Robotics and Engineering Systems(LARSyS). Since 2012, he has been an Adjunct Scientist with the National Institute of Oceanography, Goa, India. He was elected Chair, IFAC Technical Committee Marine Systems, from 2008-2014. He has coordinated and participated in a large number of international projects that have led to the design, development, and field-testing of single and multiple autonomous marine and air vehicles and systems in cooperation with partners in India (National Institute of Oceanography, Goa), USA (Naval Postgraduate School, Monterey, CA), Korea (KAIST, Daejeon), and Europe. His research interests include Marine Robotics with applications to the development of aerial and marine robots for ocean exploration and exploitation. He is the Director of the FCT-IST Phd Program NETSyS (Networked Cyber Physical Systems)

His expertise includes Dynamical Systems Theory, Marine Robotics, Navigation, Guidance, and Control of Autonomous Vehicles, and Networked Control and Estimation with applications to air and underwater robots. His long-term goal is to contribute to the development of advanced robotic systems for ocean resources exploration and exploitation.

Selected EU (European Union) funded projects for which he was IST´s Principal Investigator include: i) H2020-ICT-2014-1/ GA 645141 **WIMUST**: Widely Scalable Mobile Underwater Sonar Technology, 2015-2018; ii) FP7-ICT-2013-2 GA 611373 **CADDY:** Cognitive Autonomous Diving Buddy, 2014-2016; iii) FP7-ICT-2011-7 GA 288704 **MORPH**: Marine Robotic System of Self-Organizing, Logically Linked Physical Nodes, 2012-2016: iv) FP7-ICT-2007-3 GA 231378 **CO3-AUVs**: Cooperative Cognitive Control for Autonomous Underwater Vehicles, 2009-2012; v) EU-FP6-IST-035223 **GREX**: Coordination and Control of Cooperating Heterogeneous Unmanned Systems in Uncertain Environments, 2006-2009.

He is currently the Director of the FCT-IST PhD program on Networked Interactive Cyber Physical Systems (NETSyS) and a Member of the Editorial Board of the Springer Intelligent Systems, Control and Automation Book Series. He was Elected Chair, IFAC Technical Committee Marine Systems, from 2008-2014. He has also been a member of the International Program Committees of numerous conferences on dynamical systems and control as

well as marine and aerial robotics. He has supervised or co-supervised 11 postdoctoral and 15 PhD students. He has published a total of 82 books, book chapters, and peer reviewed journal papers, and 250 conference papers (9104 Citations, h-index 49, i10-index 191 / Google Scholar).

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PROFESSIONAL NETWORKS

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PUBLICATIONS

THESIS

MSc Thesis

A. Pascoal, ***Identifiability of Linear Time-Invariant Systems***. Department of Electrical Engineering, University of Minnesota, Minneapolis, Minnesota, USA, 1983 (advisor: Prof. Bruce Lee).

PhD Thesis

A. Pascoal, ***Nonlinear Time-Varying Feedback Controllers for Linear Time-Invariant Plants***. Department of Control Science, University of Minnesota, Minneapolis, Minnesota, USA, 1987 (advisor: Prof. Pramod Khargonekar).

BOOKS (5)

[B5] I. Kaminer; A. Pascoal, E. Xargay, N. Hovakimyan, V. Cichella, V. Dobrokhodov, ***Time-Critical Cooperative Control of Autonomous Air Vehicles***, Elsevier-Butterworth-Heinemann, August 2017.
ISBN: 9780128099469

[B4] A. Pascoal, M. Helfert, O. Gusikhin, Editors, ***Proceedings of the 3rd International Conference on Vehicle Technology and Intelligent Transport Systems, April 2017 - VEHITS 2017*** - Porto, Portugal. Sponsor: Institute for Systems and Technologies of Information, Control and Communication (INSTICC), Publisher: SciTePress.
ISBN: 978-989758242-4

[B3] P. Ridao, A. Pascoal, and C. Silvestre, Editors, ***Proceedings of the Maneuvering and Control of Marine Craft Conference (MCMC2006),*** Lisbon, Portugal, September 2006

[B2] K. Valavanis, G. Saridis, A. Pascoal, P. Lima, and F. Lobo Pereira (Eds), ***Proceedings of the U.S./Portugal Workshop on Undersea Robotics and Intelligent Control***, University of Southwestern Louisiana Press, May 1995

[B1] A. Healey, J. Bellingham, A. Pascoal, and F. Lobo Pereira (Eds), Editors, ***Proceedings of the 1st European Meeting on Autonomous Underwater Vehicles***, Porto, Portugal, 1993.

BOOK CHAPTERS (11)

[BC12] D. Moreno-Salinas, N. Crasta, A. Pascoal, J. Aranda, "***Range-based Navigation Algorithms for Marine Applications***," accepted for publication in "Cooperative Localization and Navigation: Theory, Research and Practice", CRC Press & Routledge - Taylor & Francis Group, Editors Chao Gao, Guorong Zhao, and Nora Konopka, 2019.

[BC11] F. Rego, N. Hung, C. Jones, A. Pascoal, and A. Aguiar, "***Cooperative Path Following Control with Logic-Based Communications: Theory and Practice***," accepted for publication in "Modelling and Control of Autonomous Vehicles", IET, London, UK, Editors Sanjay Sharma and Bidyadhar Subudhi, 2018

[BC10] K. Kebkal, O. Kebkal, V. Kebkal, A. Pascoal, J. Ribeiro, M. Rufino, L. Sebastião, G. Indiveri, L. Pollini, E, Simetti, "***Hydro-Acoustic Communications and Networking in Contemporary Underwater Robotics: Instruments and Case Studies***," accepted for publication in "Modelling and Control of Autonomous Vehicles", IET, London, UK, Editors Sanjay Sharma and Bidyadhar Subudhi, 2018

[BC9] A. Pedro Aguiar, F. Bayer, J. Hauser, A. Hausler, G. Notarstefano, A. Pascoal, A. Rucco, A. Saccon, "***Constrained Optimal Motion Planning for Autonomous Vehicles Using PRONTO***," in Sensing and Control for Autonomous Vehicles, Lecture Notes in Control and Information Sciences Book Series, Springer-Cham, Vol. 474, Thor Fossen, K. Pettersen, and H. Nijmeijer (Eds.), pp. 207-226, 2017.
https://doi.org/10.1007/978-3-319-55372-6_10.
ISBN:978-3-319-55371-9 (Print), 978-3-319-55372-6 (Online).

[BC8] Jorge M Soares, A Pedro Aguiar, António M Pascoal, Alcherio Martinoli, "***A graph-based formation algorithm for odor plume tracing***," in Distributed Autonomous Robotic Systems, Springer, Tokyo, pp. 255-269, 2016.
https://doi.org/10.1007/978-4-431-55879-8_18
ISBN: 978-4-431-55877-4

[BC7] Isaac Kaminer, Enric Xargay, Venanzio Cichella, Naira Hovakimyan, Antonio Manuel Pascoal, A. Pedro Aguiar, Vladimir Dobrokhodov, and Reza Ghabcheloo, "***Time-Critical Cooperative Path Following of Multiple UAVs: Case Studies***," in Advances in Estimation, Navigation, and Spacecraft Control, a Special Edition with selected papers presented at the Itzhack Y. Bar-Itzhack Memorial Symposium on Estimation, Navigation, and Spacecraft Control, Springer-Verlag, Daniel Choukroun, Yaakov Oshman, Julie Thienel, and Moshe Idan (Eds.), 2015, pp. 209-235.
https://doi.org/10.1007/978-3-662-44785-7_12. ISBN: 978-3-662-44784-0 (Print) 978-3-662-44785-7 (Online).

[BC6] V. Hassani and A. Pascoal, "***Wave Filtering and Dynamic Positioning of Marine Vessels using a Linear Design Model: Theory and Experiments,*** " in "Transport of Water versus Transport over Water - Exploring the dynamic interplay between transport and water," Springer, Cham, Operations Research/Computer Science Interface Series, Vol. 58, C. Ocampo-Martinez and R. Negenborn (Eds.), 2015, pp. 315-343.
https://doi.org/10.1007/978-3-319-16133-4_17.
ISBN: 978-3-319-16132-7 (Print) 978-3-319-16133-4 (Online).

[BC5] J. Soares, A. Pedro Aguiar, A. Pascoal, A. Martinoli, "***Design and Implementation of a Range-Based Formation Controller for Marine Robots***, " In ROBOT2013: First Iberian Robotics Conference, Advances in Intelligent Systems and Computing, Springer, Volume 252, Manuel A. Armada, Alberto Sanfeliu, and Manuel Ferre (Eds.), 2014, pp 55-67.
https://doi.org/10.1007/978-3-319-03413-3_5.
ISBN: 978-3-319-03412-6 (Print) 978-3-319-03413-3 (Online).

[BC4] A. Pedro Aguiar and António Pascoal, "***Cooperative Control of Multiple Autonomous Marine Vehicles: Theoretical Foundations and Practical Issues***," in Further Advances in Unmanned Marine Vehicles, IET, Geoff Roberts and Robert Sutton (Eds.), Chapter 12, 2012.
https://doi.org/10.1049/PBCE077E_ch12. ISBN: 978-1-84919-479-2.

[BC3] R. Ghabcheloo, A. Pascoal, C. Silvestre, and I. Kaminer, "***Coordinated Path Following Control of Multiple Vehicles Subject to Bidirectional Communication Constraints***," in Group Coordination and Cooperative Control, Springer Series on Lecture Notes in Control and Information Sciences, Vol. 336, K. Pettersen, J. Gravdahl, and H. Nijmeijer (Eds.), 2006, pp.93-111.
https://doi.org/10.1007/11505532_6.
ISBN: 978-3-540-33468-2 (Print) 978-3-540-33469-9 (Online).

[BC2] A. Pascoal, C. Silvestre, and P. Oliveira, "***Vehicle and Mission Control of Single and Multiple Autonomous Marine Robots***," Advances in Unmanned Marine Vehicles, G. Roberts and R. Sutton (Eds), IEE Control Series 69, April 2006, pp. 353-386.
https://doi.org/10.1049/PBCE069E_ch17.
ISBN: 9780863414503.

[BC1] A. Pascoal, R. Kosut, G. Franklin, D. Meldrum, and M. Workman, "***Adaptive Time-Optimal Control of Flexible Structures***," in Advances in Adaptive Control. IEEE Press, K. Narendra, R. Ortega, and P. Dorato (Eds), 1991, pp. 320-325.
ISBN: 9780879422783.

JOURNAL PUBLICATIONS (75)

2019

[J75] L. Ignacio, R. Victor, F. Del Rio, A. Pascoal, "***Optimized design of an autonomous underwater vehicle, for exploration in the Caribbean Sea***", *Ocean Engineering,* Vol. 87, September 2019.
https://doi.org/10.1016/j.oceaneng.2019.106184

[J74] L. Brinon, A. Seuret, A. Pascoal, "***Circular formation control for cooperative target tracking with limited information,***" *Journal of the Franklin Institute,* available online 25 Jan. 2019.

2018

[J73] V. Hassani, A. Pascoal, T. Onstein, "***Data Driven Control in Marine Systems,***" *Annual Reviews in Control*, Volume 46, 2018, pp. 343-349
https://doi.org/10.1016/j.arcontrol.2018.10.006

[J72] N. Crasta, D. Moreno~Salinas, A. Pascoal, J, Aranda, "***Multiple autonomous surface vehicle motion planning for cooperative range-based underwater target localization,***" *Annual Reviews in Control,* Volume 46, 2018, pp. 326-342.
https://doi.org/10.1016/j.arcontrol.2018.10.004

[J71] E. Zereik, M. Bibuli, N. Miskovic, P. Ridao, A. Pascoal, "***Challenges and future trends in marine robotics***," *Annual Reviews in Control,* Volume 46, 2018, pp. 350-368.
https://doi.org/10.1016/j.arcontrol.2018.10.002

[J70] D. Salinas, A. Pascoal, J Aranda, "***Multiple Underwater Target Positioning with Optimally Placed Acoustic Surface Sensor Networks***," *International Journal of Distributed Sensor Networks*, Vol. 1 4(5), May 2018.
https://doi.org/10.1177/1550147718773234

[J69] V. Hassani, A. Pascoal, A. Sorensen, "***Detection of Mooring Line Failure using Dynamic Hypothesis Testing,***" *Ocean Engineering*, Vol. 159, 1 July 2018, pp. 496-503.
https://doi.org/10.1016/j.oceaneng.2018.01.021

2017

[J68] B. Bayat, N. Castra, A. Crespi, A. Pascoal, A. Ijspeert, "***Environmental monitoring using autonomous vehicles: a survey of recent searching techniques***," *Current Opinions on Biotechnology*, Volume 45, June 2017, pp. 76.84.

https://doi.org/10.1016/j.copbio.2017.01.009

[J67] J. Almeida, C. Silvestre, and A. M. Pascoal, "***Event-triggered output synchronization of heterogeneous multi-agent systems,***" *International Journal of Robust and Nonlinear Control,* Volume 27, Issue 8, May 2017, pp. 1302–1338. *https://doi.org/10.1002/rnc.3629*

[J66] F. Teixeira, J. Quintas, P. Maurya, A. Pascoal, "***Robust particle filter formulations with application to terrain-aided navigation***," *International Journal of Adaptive Control and Signal Processing*, 31 (4), April 2017, pp. 608-651. *https://doi.org/10.1002/acs.2692.*

[J65] J. Almeida, C. Silvestre, A. Pascoal, "***Synchronization of multi-agent systems using event-triggered and self-triggered broadcast***," *IEEE Trans. Automatic Control,* Vol. 26, No. 9, Sept. 2017, pp. 4741 – 4746. *https://doi.org/10.1109/TAC.2017.2671029*

[J64] Vahid Hassani, Asgeir J. Sørensen, António M. Pascoal, and Michael Athans, "***Robust dynamic positioning of offshore vessels using mixed-μ synthesis: modeling, design, and practice***, *Ocean Engineering,* Vol. 129, Jan. 2017, pp. 389-400. *https://doi.org/10.1016/j.oceaneng.2016.10.041*

2016

[J63] M. Bayat, N. Crasta, A. P. Aguiar, and A. M. Pascoal, "***Range-based underwater vehicle localization in the presence of unknown ocean currents: theory and experiments***," *IEEE Transactions on Control Systems Technology*, Volume 24, Issue 1, Jan. 2016, pp. 122-139. *https://doi.org/10.1109/TCST.2015.2420636.*

[J62] Andreas J. Häusler, Alessandro Saccon, A. Pedro Aguiar, John Hauser, António M. Pascoal, "***Energy-optimal motion planning for multiple robotic vehicles with collision avoidance***," *IEEE Transactions on Control Systems Technology*, Vol. 24, No. 3, May 2016, pp. 867-883. *https://doi.org/10.1109/TCST.2015.2475399.*

[J61] David Moreno-Salinas, Antonio Pascoal, and Joaquin Aranda, "***Optimal sensor placement for acoustic underwater target positioning with range-only measurements***", in *IEEE Journal of Oceanic Engineering*, Vol. 41, No.3, January 2016, pp. 620-643. *https://doi.org/10.1109/JOE.2015.2494918.*

[J60] F. Teixeira, J. Quintas, A. Pascoal, "***AUV terrain-aided navigation using a Doppler velocity logger***", *Annual Reviews in Control,* 42, 2016, pp. 166-176. *https://doi.org/10.1016/j.arcontrol.2016.10.002.*

[J59] Venanzio Cichella, Ronald Choe, S. Bilal Mehdi, Enric Xargay, Naira Hovakimyan, Vladimir Dobrokhodov, Isaac Kaminer, António M. Pascoal, and A. Pedro Aguiar, "***Safe coordinated maneuvering of teams of multirotor unmanned aerial vehicles***," I*EEE Control Systems Magazine*, Vol. 36, No.4, August 2016, pp. 59-82.
https://doi.org/10.1109/MCS.2016.2558443.

[J58] J. Almeida, C. Silvestre, and A. M. Pascoal, "***Event-triggered output synchronization of heterogeneous multi-agent systems***," *Int. J. Robust Nonlinear Control,* 27, August 2016, pp. 1302-1338.
https://doi.org/10.1002/rnc.3629.

[J57] P. Abreu, G. Antonelli, F. Arrichiello, A. Caffaz, A. Caiti, G. Casalino, N. Volpi, N. Catenacci, Ivan de Jong, Daniela de Palma, Henrique Duarte, J. Pedro Gomes, J. Grimsdale, G. Indiveri, S. Jesus, K. Kebkal, E. Kelholt, A. Pascoal, D. Polani, L. Pollini, E. Simetti, A. Turetta, "***Widely scalable mobile underwater sonar technology: an overview of the H2020 WiMUST project***," *Marine Technology Society Journal,* Volume 50, Number 4, July/August 2016, pp. 42-53(12).
https://doi.org/10.4031/MTSJ.50.4.3.

[J56] J. Kalwa, D. Tietjen, M. Carreiro-Silva, J. Fontes, L. Brignone, N. Gracias, P. Ridao, M. Pfingsthorn, A. Birk, T. Glotzbach, S. Eckstein, M. Caccia, J. Alves, T. Furfaro, J. Ribeiro, A. *Pascoal*, "***The European project MORPH: distributed UUV systems for multimodal, 3D underwater surveys***," *Marine Technology Society Journal*, Volume 50, Number 4, July/August 2016, pp. 26-41(16). *https://doi.org/10.4031/MTSJ.50.4.10.*

[J55] N. Miskovic, M. Bibuli, A. Birk, M. Caccia, M. Egi, K. Grammer, A. Marroni, J. Neasham, A. Pascoal, A. Vasilijevic, Z. Vukic, "***CADDY—Cognitive Autonomous Diving Buddy: two years of underwater human-robot interaction,***" *Marine Technology Society Journal,* Volume 50, Number 4, July/August 2016, pp. 54-66(13).
https://doi.org/10.4031/MTSJ.50.4.11.

2015

[J54] J. Almeida, C. Silvestre, A. Pascoal, "***Self-triggered state-feedback control of linear plants under bounded disturbances***," *Int. J. Robust Nonlinear Control,* Vol. 25, no. 8, May 2015, pp. 1230-1246.
https://doi.org/10.1109/CDC.2010.5717200.

[J53] V. Cichella, I. Kaminer, V. Dobrokhodov, E. Xargay, R. Choe, N. Hovakimyan, A. Aguiar, A. Pascoal, "***Cooperative path-following of multiple multirotors over time-varying networks***," *IEEE Transactions on Automation Science and Engineering,* Vol. 12, No. 3, July 2015, pp. 945-957.
https://doi.org/10.1109/TASE.2015.2406758.

[J52] N. Crasta, M. Bayat, A. Pedro Aguiar, and A. Pascoal, "***Observability analysis of 3D AUV trimming trajectories in the presence of ocean currents using range and depth measurements***," *IFAC Annual Reviews in Control*, Volume 40, 2015, Pages 142–156.
https://doi.org/10.1016/j.arcontrol.2015.09.009.

2014

[J51] F. Rego, E. Weerdt, E. Oort, E. Kampen, O. Chu, A. Pascoal, "***Determination of inner and outer bounds of reachable sets through subpavings***," *Mathematics in Computer Science*, Vol. 8, Issue 3-4, Sept. 2014, pp. 425-442.
https://doi.org/10.1007/s11786-014-0199-4.

[J50] B. Guerreiro, C. Silvestre, R. Cunha, A. Pascoal, "***Trajectory tracking nonlinear model predictive control for autonomous surface craft***," *IEEE Transactions on Control Systems Technology*, Vol. 22. No. 6, Nov. 2014, pp. 2160-2175.
https://doi.org/10.1109/TCST.2014.2303805.

[J49] J. Almeida, C. Silvestre, A. Pascoal, "***Self-triggered output feedback control of linear plants in the presence of unknown disturbances***", *IEEE Transactions on Automatic Control*, vol. 59, no. 11, November 2014, pp. 3040-3045.
https://doi.org/10.1109/TAC.2014.2318091.

[J48] A. Marino, G. Antonelli, A. Aguiar, A. Pascoal, "***A decentralized strategy for multirobot sampling/patrolling: theory and experiments***," *IEEE Transactions on Control Systems Technology*, Vol.3, Issue 1, April 2014, pp. 313-322.
https://doi.org/10.1109/TCST.2014.2312550.

2013

[J47] Enric Xargay, Vladimir Dobrokhodov, Isaac Kaminer, Antonio Pascoal, Naira Hovakimyan, and Chengyu Cao, "***Time-critical cooperative control of multiple autonomous vehicles: robust decentralized strategies for path-following control and time-coordination over dynamic communications networks***," *IEEE Control Systems Magazine*, Vol. 32 No.5, October 2012, pp. 49-73.
https://doi.org/10.1109/MCS.2012.2205477.

[J46] E. Xargay, I. Kaminer, A. Pascoal, N. Hovakimyan, V. Dobrokhodov, V. Cichella, P. Aguiar, and R. Ghabcheloo, "***Time-Critical Cooperative Path Following of Multiple UAVs over Time-Varying Network***s," *AIAA Journal of*

Guidance, Control, and Dynamics, Vol. 36, No. 2, March–April 2013, pp. 499 516. *https://doi.org/10.2514/1.56538*.

[J45] D. Moreno-Salinas. A. Pascoal, J. Aranda, "***Optimal Sensor Placement for Multiple Target Positioning with Range-Only Measurements in Two-Dimensional Scenarios***," *Sensors*, 2013; 13(8): 10674-10710. *https://dio.org/10710. 10.3390/s130810674*.

[J44] D. Moreno-Salinas. A. Pascoal, J. Aranda, "***Sensor Networks for Optimal Target Localization with Bearings-Only Measurements in Constrained Three-Dimensional Scenarios***," *Sensors*, 2013; 13(8):10386-10417. *https://doi.org/10.3390/s130810386*.

[J43] F. Arrichiello, G. Antonelli, A. Aguiar, A. Pascoal,"***An observability metric for underwater vehicle localization using range measurements***," in *Sensors*, 2013; 13(12), pp. 16191-16215. *https://doi.org/10.3390/s131216191.*

2012

[J42] J. Almeida, C. Silvestre, A . Pascoal, "***Cooperative control of multiple surface vessels with discrete-time periodic communications***," *International Journal of Robust and Nonlinear Control*, vol. 22, no. 4, March 2012, pp. 398-419. *https://doi.org/10.1002/rnc.1698*.

[J41] J. Almeida, C. Silvestre, and A. Pascoal, "***Continuous-time consensus with discrete-time communications***," *Systems & Control Letters*, vol. 61, no. 7, July 2012, pp. 788-796. *https://doi.org/10.1016/j.sysconle.2012.04.004.*

[J40] E. Xargay, V. Dobrokhodov, I. Kaminer, A. Pascoal, N. Hovakimyan, C. Cao, "***Time-Critical Cooperative Control of Multiple Autonomous Vehicles***," *IEEE Control Systems Magazine*, Vol. 32, Issue: 5, October 2012, pp. 49-73. *https://doi.org/10.1109/MCS.2012.2205477***.**

2010-2011

[J39] I. Kaminer, A. Pascoal,. E. Xargay, N. Hovakimyan, C. Cao, V. Dobrokhodov, "***Path Following for Unmanned Aerial Vehicles using L1 Adaptive Augmentation of Commercial Autopilots***", *Journal of Guidance, Control, and Dynamics,* Vol. 33, N0. 2, March-April 2010, pp. 550-565. *https://doi.org/10.2514/1.42056.*

[J38] Francisco C. Teixeira, A. Pedro Aguiar and António M. Pascoal, "***Nonlinear adaptive control of an underwater towed vehicle***," *Ocean Engineering,* Vol. 37, No. 13, Sept. 2010, pp. 1193-1220.

https://doi.org/10.1016/j.oceaneng.2010.05.010.

[J37] J. Almeida, C. Silvestre, A. Pascoal, "***Cooperative control of multiple surface vessels in the presence of ocean currents and parametric model uncertainty***," *International Journal of Robust and Nonlinear Control*, vol. 20, N0. 14, September 2010, pp. 1549-1565.
https://doi.org/10.1002/rnc.1526

2009

[J36] Carlos Silvestre, Rita Cunha, Nuno Paulino, and Antonio Pascoal, "***A Bottom Following Preview Controller for Autonomous Underwater Vehicles,***" *IEEE Transaction on Control Systems Technology*, Volume 17, Issue 2, March 2009, pp. 257 - 266.
https://doi.org/0.1109/TCST.2008.922560.

[J35] R. Ghabcheloo, A. P. Aguiar, A. Pascoal, C. Silvestre, I. Kaminer, and J. Hespanha, "***Coordinated path-following in the presence of communication losses and time delays***," *SIAM - Journal on Control and Optimization*, Vol. 48, No. 1, 2009, pp. 234-265.
https://doi.org/10.1137/060678993.

[J34] Elgar Desa, R. Madhan, P. Maurya, G. Navelkar, A. Mascarenhas, S. Prabhudesai, S. Afzulpurkar, Ehrlich Desa, A. Pascoal, M. Nambiar, "***The detection of annual hypoxia in a low latitude freshwater reservoir in Kerala, India, using the small AUV Maya***," *Marine Technology Society Journal*, vol.43(3), August 2009, pp.60-70.
https://doi.org/10.4031/MTSJ.43.3.5.

[J33] G. Conte, L. Gambella, D. Scaradozzi, S. Zanoli, A. Caiti, V. Calabrò, A. Alcocer, J. Alves, B. Cardeira, R. Cunha, F. Curado, P. Oliveira, A. Oliveira, A. Pascoal, M. Rufino, L. Sebastião and C. Silvestre, "***Underwater vehicle technology in the European Research Project VENUS***," *International Journal of the Society for Underwater Technology,* vol.28 (4), 2009, pp.175-185.
https://doi.org/10.3723/ut.28.175.

2008

[J32] E. de Barros, A. Pascoal, E. de Sa, "***Investigation of a method for predicting AUV derivatives***", *Ocean Engineering*, Vol. 35, N0. 16, 2008, pp. 1627-1636.
https://doi.org/10.1016/j.oceaneng.2008.08.008.

[J31] E. de Barros, J. Dantas, A. Pascoal, E. de Sa , "***Investigation of Normal Force and Moment Coefficients for an AUV at Nonlinear Angle of Attack and Sideslip Range***," *IEEE Journal of Oceanic Engineering*, Volume 33, Issue 4, Oct. 2008, Page(s):538–549.

https://doi.org/10.1109/JOE.2008.2004761.

2007

[J30] A. Alcocer, P. Oliveira, and A. Pascoal, "***Study and Implementation of a GIB-Based Underwater Positioning System***," *IFAC Journal Control Engineering Practice*, Vol. 15, Issue 6, June 2007, pp. 689-701.
https://doi.org/10.1016/j.conengprac.2006.04.001

[J29] R. Ghabcheloo, A. Pascoal, C. Silvestre, and I. Kaminer, "***Nonlinear Coordinated Path Following Control of Multiple Wheeled Robots with Bidirectional Communication Constraints***," *International Journal of Adaptive Control and Signal Processing*, Vol. 21, Issues 2-3, March-April 2007, pp. 133-157.
https://doi.org/10.1002/acs.923.

[J28] C. Silvestre, A. Pascoal, "***Depth control of the INFANTE AUV using gain-scheduled reduced order output feedback***," "*IFAC Journal Control Engineering Practice*, Vol. 15, Issue 7, July 2007, pp. 883-895.
https://doi.org/10.1016/j.conengprac.2006.05.005.

[J27] Sajjad Fekri, Michael Athans, and A. Pascoal, "***Robust Multiple Model Adaptive Control (RMMAC): A Case Study***," *International Journal of Adaptive Control and Signal Processing*, Vol. 21, Issue 1, February 2007, pp. 1-30.
https://doi.org/10.1002/acs.944.

[J26] Elgar Desa, P.Maurya, A.Pereira, R. G. Prabhudesai, A. Mascarenhas, Ehrlich Desa, Antonio Pascoal, R.Madhan, S. G. P.Matondkar, G. Navelkar, S. Prabhudesai, and S. Afzulpurkar, "***A Small Autonomous Surface Vehicles (ASV) for Ocean Color Remote Sensing***," *IEEE Journal of Ocean Engineering,* Vol. 32, Issue 2, April 2007, pp. 353-364.
https://doi.org/10.1109/JOE.2007.893688.

[J25] A. Aguiar, J. Hespanha, A. Pascoal, "***Switched Seesaw Control for the Stabilization of Underactuated Vehicles***," *Automatica*, Volume 43, Issue 12, Dec. 2007, pp. 1997-2008.
https://doi.org/10.1016/j.automatica.2007.03.023.

[J24] A. Aguiar and A. Pascoal, "***Dynamic Positioning and Way-Point Tracking of Underactuated AUVs in the Presence of Ocean Currents***," *International Journal of Control*, Vol. 80, Issue 7, July 2007, pp. 1092-1108. *https://doi.org/10.1080/00207170701268882.*

2006

[J23] Sajjad Fekri, Michael Athans and António Pascoal, "***Issues, progress and new results in robust adaptive control,***" *International Journal of Adaptive*

Control and Signal Processing, Vol. 20, Issue 10, December 2006, pp 519-579. *https://doi.org/10.1002/acs.912.*

[J22] Reza Ghabcheloo, António Pascoal, Carlos Silvestre, "***Coordinated Path-Following Control of Multiple Wheeled Robots using Linearization Techniques***," I. Kaminer, *International Journal of Systems Science*, Taylor & Francis, Vol. 37, Issue 6, 2006, pp. 399-414. *https://doi.org/10.1080/00207720500438324.*

[J21] L. Lapierre, D. Soetanto, António Pascoal, "***Non-Singular Path-Following Control of a Unicycle in the Presence of Parametric Modeling Uncertainties***," *International Journal of Robust and Nonlinear Control*, Vol. 16, Issue 10, July 2006, pp. 485-503. *https://doi.org/ 10.1002/rnc.1075.*

2005

[J20] F. Cardigos, A. Colaço, P.R. Dando, S. Ávila, P.-M. Sarradin, F. Tempera, P. Conceicão, A. Pascoal, and R. Serrão Santos, "***Shallow water hydrothermal vent field fluids and communities of the D. João de Castro Seamount (Azores)***," *Chemical Geology*, Elsevier, Vol. 224, Issues 1-3, 2005, pp. 153-168. *https://doi.org/10.1016/j.chemgeo.2005.07.019*.

2004

[J19] C. Silvestre and A. Pascoal, "***Control of the Infante AUV using Gain-Scheduled Static Output Feedback,***" *IFAC Journal Control Engineering Practice,* Vol. 12, Issue 12, 2004, pp. 1501-1509. *https://doi.org/10.1016/j.conengprac.2004.02.012.*

[J18] J. Hespanha, O. Yakimenko, I. Kaminer , and A. Pascoal, "***Linear Parametrically Varying Systems with Brief Instabilities: An Application to Integrated Vision/IMU Navigation***," *IEEE Transactions on Aerospace and Electronic Systems,* Vol. 40, Issue 3, 2004, pp. 889-902. *https://doi.org/10.1109/TAES.2004.1337462.*

2000-2003

[J17] C. Silvestre, A. Pascoal, and I. Kaminer, "***On the Design of Gain-Scheduled Trajectory Tracking Controllers***," *International Journal of Robust and Nonlinear Control,* Vol. 12, Issue 9, July 2002, pp. 797-839. *https://doi.org/10.1002/rnc.705*.

[J16] I. Kaminer, A. Pascoal, W. Kang, and O. Yakimenko, "***Applications of Nonlinear Filtering to Navigation System Design Using Passive Sensors***," *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 37, Issue 1, January 2001, pp. 158-172.
https://doi.org/10.1109/7.913675.

[J15] A. Pascoal, I. Kaminer, and P. Oliveira, "***Navigation System Design using Time-Varying Complementary Filters***," *IEEE Trans. Aerospace and Electronic Systems,* Vol. 36, Issue 4, October 2000, pp. 1099-114. *https://doi.org/10.1109/7.892661.*

1987-1999

[J14] P. Encarnação, A. Pascoal, and A. Healey, "***Underwater Vehicle Design using Integrated Plant/Controller Optimization Methods***," *International Journal of Systems Science,* Vol. 30, Issue 9, 1999, pp. 1057-1092.
https://doi.org/10.1080/002077299291903.

[J13] E. Hallberg, I. Kaminer, and A. Pascoal, "***Development of a Rapid Flight Test Prototyping System for Unmanned Air Vehicles***," *IEEE Control Systems Magazine*, Vol. 19, Issue 1, February 1999, pp. 55-65.
https://doi.org/10.1109/37.745769.

[J12] I. Kaminer, A. Pascoal, E. Hallberg, and C. Silvestre, "Traj***ectory Tracking for Autonomous Vehicles: An Integrated Approach to Guidance and Control***," *Journal of Guidance, Control, and Dynamics*, Vol. 21, No.1, Jan-Fev. 98, pp. 29-38.
https://doi.org/10.2514/2.4229.

[J11] C. Silvestre and A. Pascoal, "***Control of an AUV in the Vertical and Horizontal Plane: System Design and Tests at Sea***, " *IEEE Transactions of the Institute of Measurement and Control,* Vol. 19, Issue 3, 1997, pp. 126-138.
https://doi.org/10.1177/014233129701900303.

[J10] A. Pascoal, C. Silvestre, P. Oliveira, A. Bjerrum, G. Ayela, J. Paul-Pignon, S. Bruun, and C. Petzelt, "***MARIUS: An Autonomous Underwater Vehicle for Coastal Oceanography***", *IEEE Robotics and Automation Magazine,* Vol. 4, Special Issue on Robotics and Automation in Europe: Projects funded by the Commission of the European Union, Dec. 1997, pp. 46-59.
https://doi.org/10.1109/100.637805.

[J09] P. Oliveira, A. Pascoal, V. Silva, and C. Silvestre, "***The Mission Control System of the MARIUS Autonomous Underwater Vehicle: System Design and Implementation, and Tests at Sea***", International Journal of Systems Science, Special Issue on Underwater Robotics, Vol. 29, No. 10, 1997, pp. 1065-1080.
https://doi.org/10.1080/00207729808929598.

[J08] D. Fryxell, P. Oliveira, A. Pascoal, C. Silvestre, and I. Kaminer, "***Navigation, Guidance and Control of AUVs: An Application to the MARIUS Vehicle***", *Control Engineering Practice*, Vol. 4, Issue 3, March 1996, pp. 401-409.
https://doi.org/10.1016/0967-0661(96)00018-4.

[J07] I. Kaminer, A. Pascoal, P. Khargonekar, and E. Coleman, "***A Velocity Algorithm for the Implementation of Gain-scheduled Controllers",*** *Automatica*, Vol. 31, Issue 8, August 1995, pp. 1185-1191. *https://doi.org/10.1016/0005-1098(95)00026-S.*

[J06] A. Pascoal, R. Ravi, and P. Khargonekar, "***The Graph Topology for Linear Plants with Applications to Nonlinear Robust Stabilization***," *IEEE Transactions on Automatic Control*, Vol. 38, Issue 2, February 1993, pp. 298-*https://doi.org/302. 10.1109/9.250477.*

[J05] R. Ravi, A. Pascoal, and P. Khargonekar, "***Normalized Coprime Factorizations for Linear Time-Varying Systems,***" *Systems and Control Letters,* Vol. 18, No. 6, June 1992, pp.455-465.
https://doi.org/10.1016/0167-6911(92)90050-3.

[J04] P. Khargonekar, A. Pascoal, and R. Ravi, "***Strong, Simultaneous, and Reliable Stabilization of Finite Dimensional Linear Time-Varying Plants***", *IEEE Trans. on Automatic Control,* Vol. AC-33, No.12, December 1988, pp. 1158-1161.
https://doi.org/10.1109/9.14439.

[J03] A. Pascoal, P. Khargonekar, and T. Georgiou, "***Pointwise Stabilizability of Families of Linear Time-Invariant Plants***", *IEEE Trans. on Automatic Control,* Vol. AC-33, No.12, December 1988, pp. 1161-1165.
https://doi.org/10.1109/9.14440.

[J02] T. Georgiou, A. Pascoal, and P. Khargonekar, "***On the Robust Stabilizability of Uncertain Linear Time-Invariant Plants using Nonlinear Time-Varying Controllers***", *Automática,* Vol. 23, No. 5, September 1987, pp. 617-624.
https://doi.org/10.1016/0005-1098(87)90057-4.

[J01] P. Khargonekar, T. Georgiou, and A. Pascoal, "***On the Robust Stabilizability of LTI Plants with Unstructured Uncertainty***", *IEEE Trans. on Automatic Control,* Vol. AC-32, No.3, March 1987, pp. 201-207. *https://doi.org/10.1109/TAC.1987.1104573.*

PROCEEDINGS OF PEER-REVIEWED CONFERENCES (256)

Representative samples: years 2015-2018

2018

J. Quintas, F. Teixeira, A. Pascoal, "***An Integrated System for Geophysical Navigation of Autonomous Underwater Vehicles***," Proc. 11th IFAC Conference on Control Applications in Marine Systems, Robotics, and Vehicles, CAMS 2018, Opatija, Croatia, 10-12 Sept. 2018, IFAC-PapersOnLine, Volume 51, Issue 29, 2018, Pages 293-298.
https://doi.org/10.1016/j.ifacol.2018.09.518

N. Hung, F. Rego, N. Crasta, A. Pascoal, "***Input-Constrained Path Following for Autonomous Marine Vehicles with a Global Region of Attraction,"*** Proc. 11th IFAC Conference on Control Applications in Marine Systems, Robotics, and Vehicles, CAMS 2018, Opatija, Croatia, 10-12 Sept. 2018, IFAC-PapersOnLine, Volume 51, Issue 29, 2018, Pages 348-353.
https://doi.org/10.1016/j.ifacol.2018.09.499

D. Salinas, N. Crasta, A. Pascoal, J. Aranda, "***Optimal multiple underwater target localization and tracking using two surface acoustic ranging sensors,"*** Proc. 11th IFAC Conference on Control Applications in Marine Systems, Robotics, and Vehicles, CAMS 2018, Opatija, Croatia, 10-12 Sept. 2018, IFAC-PapersOnLine, Volume 51, Issue 29, 2018, Pages 177-182.
https://doi.org/10.1016/j.ifacol.2018.09.489

E. Herji, P. André, J. Gomes, P. Góis, A. Pascoal, "***A Study of Modulation Formats for the Blue Ray Underwater Optical Modem***," Proc. 2018 Fourth Underwater Communications and Networking Conference (UComms), Lerici, Italy, 8-30 Aug. 2018.
https://doi.org/10.1109/UComms.2018.8493184

R. Rodrigues, A. Aguiar, A. Pascoal, "***A B-spline Mapping Framework for Long-Term Autonomous Operations,"*** in Proc. IROS'18 - IEEE/RSJ, International Conference on Intelligent Robots and Systems, Madrid, Spain, Oct. 2018.
https://doi.org/10.1109/IROS.2018.8594456

N. Volpi, S. Smith, A. Pascoal, E. Simetti, A. Turetta, M. Alibani, D. Polani, "***Decoupled Sampling-Based Motion Planning for Multiple Autonomous Marine Vehicles,"*** in Proc. OCEANS 2018 MTS/IEEE, Charleston, USA, 22-25 Oct. 2018.
https://doi.org/10.1109/OCEANS.2018.8604908

P. Felisberto, P. Santos, F. Zabel, S. M. Jesus, L. Sebastião, A. Pascoal, ***"An AUV Mounted Vector-Sensor for Seismic Surveying,"*** in Proc. 2018 OCEANS - MTS/IEEE Kobe Techno-Oceans (OTO), Kobe, Japan, 28-31 May 2018.
https://doi.org/10.1109/OCEANSKOBE.2018.8559205

G. Indiveri and the H2020 WiMUST Project Team, "***Geotechnical Surveys with Cooperative Autonomous Marine Vehicles: the EC WiMust project,"*** in Proc. 2018 IEEE OES Autonomous Underwater Vehicle Symposium, Nov. 6-9, Porto, Portugal.

F. Rego, H. Hung, A. Pascoal, "***Cooperative path-following of autonomous marine vehicles: theory and experiments,"*** in Proc. 2018 IEEE OES Autonomous Underwater Vehicle Symposium, Nov. 6-9, Porto, Portugal.

B. Sabetghadam, R. Cunha, A. Pascoal, "***Cooperative Motion Planning with Time, Energy, and Active Navigation Constraints,"*** in Proc. 2018 IEEE OES Autonomous Underwater Vehicle Symposium, Nov. 6-9, Porto, Portugal.

R. Rodrigues, A. Aguiar, A. Pascoal, "***A coverage planner for AUVs using B-splines,"*** in Proc. 2018 IEEE OES Autonomous Underwater Vehicle Symposium, Nov. 6-9, Porto, Portugal.

N. Crasta, D. Salinas, B. Bayat, A. Pascoal, and J. Aranda, "***Range-based underwater target localization using an autonomous surface vehicle: observability analysis,***" in Proc. 2018 IEEE/ION Position, Location and Navigation Symposium (PLANS). Monterey, CA, USA, 23-26 April, 2018.
https://doi.org/10.1109/PLANS.2018.8373417

D. De Palma, G. Indiveri, and A. Pascoal, "***Advances on a null-space-based approach to range-only underwater steering and positioning,***" in Proc. 2018 IEEE/ION Position, Location and Navigation Symposium (PLANS). Monterey, CA, USA, 23-26 April, 2018.
https://doi.org/10.1109/PLANS.2018.8373415

J. Quintas, F. Teixeira, and A. Pascoal, "***AUV geophysical navigation using magnetic data — The MEDUSA GN system,***" in Proc. 2018 IEEE/ION Position, Location and Navigation Symposium (PLANS). Monterey, CA, USA, 23-26 April, 2018.
https://doi.org/10.1109/PLANS.2018.8373495

2017

L. Briñón-Arranz, A. Seuret, A. Pascoal, "***Target Tracking via a Circular Formation of Unicycles***," Proc. IFAC World Congress, Toulouse, France, July 2017, IFAC-PapersOnLine, Volume 50, Issue 1, July 2017, Pages 5782-5787.
https://doi.org/10.1016/j.ifacol.2017.08.422

F. Teixeira, J, Quintas, A. Pascoal, "***Robust Methods of Magnetic Navigation of Marine Robotic Vehicles,***" Proc. IFAC World Congress, Toulouse, France, July 2017. IFAC-Papers OnLine, Vol. 50, Issue 1, 2017, Pages 3470-3475.
https://doi.org/10.1016/j.ifacol.2017.08.851

N. Crasta, D. Moreno-Salinas, A. Pascoal, J. Aranda, "***Range-Based Cooperative Underwater Target Localization,***" Proc. IFAC World Congress, Toulouse, France, July 2017. IFAC-Papers OnLine, Volume 50, Issue 1, July 2017, Pages 12366-12373.
https://doi.org/10.1016/j.ifacol.2017.08.2069

Vahid Hassani, Tord F. Onstein, António M. Pascoal, "***Application of Data Driven Control to Dynamic Positioning***," Proc. IFAC World Congress, Toulouse, France, July 2017. IFAC-Papers OnLine, Volume 50, Issue 1, July 2017, Pages 12392-12397.
https://doi.org/10.1016/j.ifacol.2017.08.2505

A. Mantouka, P. Felisberto, S.M. Jesus, P. Santos, L. Sebastião, A. Pascoal, "***The Application of a Dual Accelerometer Vector Sensor for the Discrimination of Seismic Reflections***", Proc. MTS/IEEE Oceans 2017, Abderdeen, Scotland, June 2017.
https://doi.org/10.1109/OCEANSE.2017.8084848

Francisco Rego, A. Aguiar, Antonio Pascoal, Colin N. Jones, "***A Design Method for Distributed Luenberger Observers***", Proc. 56th IEEE Conference on Decision and Control, Melbourne, Australia, Dec. 2017.
https://doi.org/10.1109/CDC.2017.8264153

Claudia Soares, Joao Gomes, Pusheng Ji, António Pascoal, "***DIeSEL: DIstributed SElf-Localization of a Network of Underwater Vehicles***," Proc. MTS/IEEE Oceans 2017, Anchorage, Alaska, USA, September 2017.
https://arxiv.org/pdf/1709.08746v1.pdf

K. Kebkal, O. Kebkal, E. Glushko, V. Kebkal, L. Sebastião, A. Pascoal, J. Gomes, J. Ribeiro, H. Silva, M. Ribeiro, G. Indiveri, "***Underwater Acoustic Modems with Integrated Atomic Clocks for One-Way Travel-Time Underwater Vehicle Positioning***", Proc. UACE2017-4th Underwater Acoustics Conference and Exhibition, Skiathos, Greece, 3-8 September 2017.
http://www.uaconferences.org/docs/UACE2017_Papers/315_UACE2017.pdf

K. Kebkal, O. Kebkal, V. Kebkal, L. Sebastião, A. Pascoal, J. Ribeiro, G. Indiveri, E. Kelholt, S. Jesus, A. Mantouka, "***Performance Assessment of Underwater Acoustic Modems Operating Simultaneously at Different Frequencies in the Presence of Background Impulsive Noise Emitted by a Sparker***", Proc. UACE2017-4th Underwater Acoustics Conference and Exhibition, Skiathos, Greece, 3-8 September 2017.
http://www.uaconferences.org/docs/UACE2017_Papers/325_UACE2017.pdf

V. Hassani, N., Crasta, A. Pascoal, "***Cyber Security Issues in Navigation Systems of Marine Vessels From a Control Perspective***," Proceedings of the ASME 2017 36th International Conference on Ocean, Offshore and Arctic

Engineering OMAE 2017, Trondheim, Norway, June 2, 5-30, 2017. *https://doi.org/10.1115/OMAE2017-61771*

2016

David Moreno-Salinas, N. Crasta, Miguel Ribero, M. Bayat, A. M. Pascoal, and J. A. Aranda, "***Integrated Motion Planning, Control, and Estimation for Range-Based Marine Vehicle Positioning and Target Localization***," Proc. 10th IFAC Conference on Control Applications in Marine Systems (CAMS´ 2016), Trondheim, Norway, September 2016. IFAC-Papers OnLine, Vol. 49, Issue 23, 2016, Pages 34-40.
https://doi.org/10.1016/j.ifacol.2016.10.318

N. Crasta, David Moreno-Salinas, M. Bayat, A. M. Pascoal, and J. A. Aranda, "***Optimal Motion Planning for Range-Based Marine Vehicle Positioning in the Presence of Unknown Currents***," Proc. 10th IFAC Conference on Control Applications in Marine Systems (CAMS´ 2016), Trondheim, Norway, September 2016. IFAC- Papers OnLine, Vol. 49, Issue 23, 2016, Pages 41-47.
https://doi.org/10.1016/j.ifacol.2016.10.319

Pedro Abreu, Hélio Morishita, António Pascoal, Jorge Ribeiro, Henrique Silva, "***Marine Vehicles with Streamers for Geotechnical Surveys: Modeling, Positioning, and Control***," Proc. 10th IFAC Conference on Control Applications in Marine Systems (CAMS´ 2016), Trondheim, Norway, September 2016. IFAC- Papers OnLine, Vol. 49, Issue 23, 2016, Pages 458-464.
https://doi.org/10.1016/j.ifacol.2016.10.448

F. Teixeira, Quintas, J., Pascoal, A., "***Experimental validation of magnetic navigation of marine robotic vehicles,"*** Proc. 10th IFAC Conference on Control Applications in Marine Systems (CAMS´ 2016), Trondheim, Norway, September 2016. IFAC- Papers OnLine, Vol. 49, Issue 23, 2016, Pages 458-464.
https://doi.org/10.1016/j.ifacol.2016.10.448

Pedro Abreu, Nikola Miskovic, Dula Nad, Antonio Pascoal, Jorge Ribeiro Miguel Ribeiro, Henrique Silva, "***Cooperative Surface/Underwater Navigation for AUV Path following Missions***, " Proc. 10th IFAC Conference on Control Applications in Marine Systems (CAMS´ 2016), Trondheim, Norway, September 2016. IFAC- Papers OnLine, Vol. 49, Issue 23, 2016, Pages 355-360.
https://doi.org/10.1016/j.ifacol.2016.10.430

Nikola Miskovic, Antonio Pascoal, Marco Bibuli, Massimo Caccia, Jeffrey A. Neasham, Andreas Birk, Murat Egi, Karl Grammer, Alessandro Marroni, Antonio Vasilijevic, Zoran Vukic, "***CADDY Project, Year 2: The First Validation Trials***, " Proc. 10th IFAC Conference on Control Applications in Marine Systems (CAMS´ 2016), Trondheim, Norway, September 2016. IFAC-Papers OnLine, Vol. 49, Issue 23, 2016, Pages 420-425.

https://doi.org/10.1016/j.ifacol.2016.10.440

Giovanni Indiveri, Gianluca Antonelli, Filippo Arrichiello, Andrea Cafaz, Andrea Caiti, Giuseppe Casalino, Nicola Catenacci Volpi, Ivan Bielic de Jong, Daniela De Palma, Henrique Duarte, Joao Pedro Gomes, Jonathan Grimsdale, Sergio Jesus, Konstantin Kebkal, Elbert Kelholt, Antonio Pascoal, Daniel Polani, Lorenzo Pollini, Enrico Simetti, and Alessio Turetta "***Overview and first year progress of the Widely Scalable Mobile Underwater Sonar Technology H2020 project***, " Proc. 10th IFAC Conference on Control Applications in Marine Systems (CAMS´ 2016), Trondheim, Norway, September 2016. IFAC- Papers OnLine, Vol. 49, Issue 23, 2016, Pages 430-433.
https://doi.org/10.1016/j.ifacol.2016.10.442

J. Quintas, Teixeira, F.C., Pascoal, A., "***Magnetic Signal Processing Methods with Application to Geophysical Navigation of Marine Robotic Vehicles***", Proc. OCEANS 2016 MTS/IEEE Conference, Monterey, CA, USA, September 2016.
https://doi.org/10.1109/OCEANS.2016.7761322

J. Soares, A. Aguiar, A. Pascoal, A. Martinolli, "***An Algorithm for Formation-Based Chemical Plume Tracing using Robotic Marine Vehicles***", Proc. OCEANS 2016 MTS/IEEE Conference, Monterey, CA, USA, September 2016.
https://doi.org/10.1109/OCEANS.2016.7761119

Pedro Gois, Nichin Sreekantaswamy, Nandeesh Basavaraju, Manuel Rufino Luis Sebastião, João Botelho, João Gomes, António Pascoal, "***Development and Validation of Blue Ray, an Optical Modem for the MEDUSA class AUVs,"*** Proc. IEEE Third Underwater Communications and Networking Conference (UComms), La Spezia, Italy, 30 August - 1 September 2016.
https://doi.org/10.1109/UComms.2016.7583455

F. Rego, Y. Pu, A. Alessandretti, A. Pedro Aguiar, A. Pascoal, C. Jones, "***Design of a Distributed Quantized Luenberger Filter for Bounded Noise***", Proc. 2016 American Control Conference (ACC´2016), July 6–8, Boston, MA, USA.
https://doi.org/10.1109/ACC.2016.7526675

J. Soares, A. Marjovi, J. Giezendanner, A, Kodiyan, A. Aguiar, A. Pascoal, A. Martinoli, "***Towards 3D Distributed Odour Source Localization: an Extended Graph-Based Formation Control Algorithm for Plume Tracking***," IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Daejeon, Korea, October 9-14, 2016.
https://doi.org/10.1109/IROS.2016.7759277

P. Abreu, J. Botelho, P. Góis, A. Pascoal, J. Ribeiro, M. Ribeiro, M. Rufino, L. Sebastião, H. Silva, "***The MEDUSA class of autonomous marine vehicles and their role in EU projects***," Proc. OCEANS'16, Shanghai, China, April 10-13, 2016.

https://doi.org/110.1109/OCEANSAP.2016.7485620

Gianluca Antonelli, Andrea Cafaz, Giuseppe Casalino, Ivan Bielic de Jong, Daniela De Palma, Henrique Duarte, Jonathan Grimsdale, Giovanni Indiveri, Sergio Jesus, Konstantin Kebkal, Antonio Pascoal, Daniel Polani, Lorenzo Pollini, "***The Widely scalable Mobile Underwater Sonar Technology (WiMUST) H2020 project: first year status***," Proc. OCEANS'16, Shanghai, China, April 10-13, 2016.
https://doi.org/10.1109/OCEANSAP.2016.7485587

2015

P. Abreu, A. Pascoal, ***"Formation Control in the scope of the MORPH project. Part I: Theoretical Foundations,"*** Proc. 4th IFAC Workshop on Navigation, Guidance, and Control of Underwater Vehicles (NGCUV´2015), Girona, Spain, 28-30 April, 2015. IFAC- Papers OnLine, Vol. 48, Issue 2, 2015, Pages 244-249.
https://doi.org/10.1016/j.ifacol.2015.06.040

Pedro Caldeira Abreu, Mohammadreza Bayat, António M. Pascoal, João Botelho, Pedro Góis, Jorge Ribeiro, Miguel Ribeiro, Manuel Rufino, Luis Sebastião, Henrique Silva, "***Formation Control in the scope of the MORPH project. Part II: Implementation and Results***," Proc. 4th IFAC Workshop on Navigation, Guidance, and Control of Underwater Vehicles (NGCUV´2015), Girona, Spain, 28-30 April, 2015. IFAC- Papers OnLine, Vol. 48, Issue 2, 2015, Pages 250-255.
https://doi.org/10.1016/j.ifacol.2015.06.041

F. Teixeira, J. Quintas, A. Pascoal, "***AUV Terrain-Aided Navigation using a Doppler Velocity Logger***," Proc. 4th IFAC Workshop on Navigation, Guidance, and Control of Underwater Vehicles (NGCUV´2015), Girona, Spain, 28-30 April, 2015. IFAC- Papers OnLine, Vol. 48, Issue 2, 2015, Pages 137-142.
https://doi.org/10.1016/j.ifacol.2015.06.022

Habib Al-Khatib, Gianluca Antonelli, Andrea Caffaz, Andrea Caiti, Giuseppe Casalino, Ivan Bielic de Jong, Henrique Duarte, Giovanni Indiveri, Sergio Jesus, Konstantin Kebkal, Antonio Pascoal and Daniel Polani, "***Navigation, Guidance and Control of Underwater Vehicles within the Widely Scalable Mobile Underwater Sonar Technology Project: An Overview,***" Proc. 4th IFAC Workshop on Navigation, Guidance and Control of Underwater Vehicles (NGCUV'2015), 28-30 April 2015, Girona, Spain. IFAC-PapersOnLine, Volume 48, Issue 2, 2015, pp. 189 -193.
https://doi.org/10.1016/j.ifacol.2015.06.031

P. Abreu, B. Bayat, J. Botelho, P. Góis, A. Pascoal, J. Ribeiro, M. Ribeiro, M. Rufino, L. Sebastião, H. Silva, "***Cooperative Formation Control in the Scope***

of the EC MORPH Project: Theory and Experiments", Proc. OCEANS´15 IEEE/MTS Genova, Italy, 18-21 May, 2015.
https://doi.org/10.1109/OCEANS-Genova.2015.7271697

Habib Al-Khatib, Gianluca Antonelli, Andrea Caffaz, Andrea Caiti, Giuseppe Casalino, Ivan Bielic de Jong, Henrique Duarte, Giovanni Indiveri, Sergio Jesus, Konstantin Kebkal, Antonio Pascoal and Daniel Polani, "***The Widely scalable Mobile Underwater Sonar Technology (WiMUST) Project: An Overview***," Proc-OCEANS'15 IEEE/MTS Genova, Italy, 18-21 May 2015. *https://doi.org/10.1109/OCEANS-Genova.2015.7271688.*

A. Hausler, A. Saccon, J. Hauser, A. Pascoal, A. Aguiar, "***A Novel Four-Quadrant Propeller Model***", Proc. Fourth International Symposium on Marine Propulsors, (SMP´15), Austin, Texas, USA, 31 May-4 June, 2015, pp. 498-505.
http://www.marinepropulsors.com/proceedings-2015.php
http://www.marinepropulsors.com/proceedings/2015/TB4-3.pdf

Daniela De Palma, Giovanni Indiveri, Antonio M. Pascoal, "***A Null-Space-Based Behavioral Approach to Single Range Underwater Positioning***," Proc. 10th IFAC Conference on Manoeuvring and Control of Marine Craft MCMC 2015 - Copenhagen, 24-26 August, 2015. IFAC - PapersOnLine, Volume 48, Issue 16, 2015, Pages 55-60.
https://doi.org/10.1016/j.ifacol.2015.10.258.

CADDY Project, Year 1: Overview of Technological Developments and Cooperative Behaviours ? IFAC GIRONA

2014

Andreas J. Häusler, Alessandro Saccon, John Hauser, António M. Pascoal, and A. Pedro Aguiar, "***Optimal Multiple Vehicle Motion Planning***," Proc. Portuguese Meeting on Optimal Control (EPCO), Aveiro, Portugal, June 2014.

D. Salinas, A. Pascoal, J. Aranda, "***Optimal Sensor Trajectories for Mobile Underwater Target Positioning with Noisy Range Measurements***," Proc. 19th IFAC World Congress, 24-29 August, Cape Town, South Africa, 2014. IFAC - PapersOnLine, Volume 47, Issue 3, 2014, Pages 5139-5144.
https://doi.org/10.3182/20140824-6-ZA-1003.02407

F. Rego, J. Soares, A. Pascoal, A. Aguiar, J. Collins, "***Flexible triangular formation keeping of marine robotic vehicles using range measurements***," Proc. 19th IFAC World Congress, 24-29 August, Cape Town, South Africa, 2014. IFAC - PapersOnLine, Volume 47, Issue 3, 2014, Pages 5145-5150.
https://doi.org/10.3182/20140824-6-ZA-1003.02435

N. Crasta, M Bayat, A. Aguiar, A. Pascoal, "***Observability Analysis of 3D AUV Trimming Trajectories in the Presence of Ocean Currents using Single Beacon Navigation***," Proc. 19th IFAC World Congress, 24-29 August, Cape Town, South Africa, 2014. IFAC - PapersOnLine, Volume 47, Issue 3, 2014, Pages 4222-4227.
https://doi.org/https://doi.org/10.3182/20140824-6-ZA-1003.02263

L. Arranz, A. Pascoal, A. Aguiar, "***Adaptive Leader-Follower Formation Control of Autonomous Marine Vehicles***, " Proc. IEEE Conference on Decision and Control (CDC), Los Angeles, California, USA, Dec. 15-17, 2014.
https://doi.org/2014. 10.1109/CDC.2014.7040222

J. Almeida, C. Silvestre, A. Pascoal, "***Output synchronization of heterogeneous LTI plants with event-triggered communication***," Proc. 53rd IEEE Conference on Decision and Control, Los Angeles, CA, USA, December 15-17, 2014.
https://doi.org/10.1109/CDC.2014.7039944

2013

Francisco Teixeira and Antonio Pascoal, "***Magnetic Navigation and Tracking of Underwater Vehicles***," Proc. CAMS 2013 - 9th IFAC Conference on Control Applications in Marine Systems, Osaka, Japan, Sept. 2013. IFAC-PapersOnLine, Volume 46, Issue 33, 2013, Pages 239-244.
https://doi.org/10.3182/20130918-4-JP-3022.00059

Vahid Hassani , Asgeir J. Sorensen, Antonio M. Pascoal, "***Adaptive Wave Filtering for Dynamic Positioning of Marine Vessels using Maximum Likelihood Identification: Theory and Experiments***," Proc. CAMS 2013 - 9th IFAC Conference on Control Applications in Marine Systems, Osaka, Japan, Sept. 2013. IFAC-PapersOnLine, Volume 46, Issue 33, 2013, Pages 203-208.
https://doi.org/10.3182/20130918-4-JP-3022.00041

Andreas Haeusler, Alessandro Saccon, John Hauser, António Pascoal, and A. Pedro Aguiar, "***Four-Quadrant Propeller Modeling: A Low-Order Harmonic Approximation***," Proc. CAMS 2013 - 9th IFAC Conference on Control Applications in Marine Systems, Osaka, Japan, Sept. 2013, IFAC-PapersOnLine, Volume 46, Issue 33, 2013, Pages 161-166.
https://doi.org/10.3182/20130918-4-JP-3022.00066

N. Crasta, M Bayat, A. Aguiar, A. Pascoal, "***Observability analysis of 2D single beacon navigation in the presence of constant currents for two classes of maneuvers***," 2013, Proc. CAMS 2013 - 9th IFAC Conference on Control Applications in Marine Systems, Osaka, Japan, Sept. 2013. IFAC-PapersOnLine, Volume 46, Issue 33, 2013, Pages 227-232.
https://doi.org/10.3182/20130918-4-JP-3022.00060

F. Rego, A. Aguiar, A. Pascoal, "***A Packet Loss Compliant Logic-Based Communication Algorithm for Cooperative Path-Following Control***," Proc. CAMS 2013 - 9th IFAC Conference on Control Applications in Marine Systems, Osaka, Japan, Sept. 2013. IFAC-PapersOnLine, Volume 46, Issue 33, 2013, Pages 262-267.
https://doi.org/10.3182/20130918-4-JP-3022.00055

D. Moreno-Salinas, A. M. Pascoal, J. Aranda, "***Underwater Target Positioning with a Single Acoustic Sensor***," Proc. CAMS 2013 - 9th IFAC Conference on Control Applications in Marine Systems, Osaka, Japan, Sept. 2013. IFAC-PapersOnLine, Volume 46, Issue 33, 2013, Pages 233-238.
https://doi.org/10.3182/20130918-4-JP-3022.00067

Thomas Glotzbach, David Moreno-Salinas, Antonio Pascoal, and Joaquin Aranda, "***Optimal Sensor Placement for Acoustic Range-Based Underwater Robot Positioning***," Proc. CAMS 2013 - 9th IFAC Conference on Control Applications in Marine Systems, Osaka, Japan, Sept. 2013. IFAC-PapersOnLine, Volume 46, Issue 33, 2013, Pages 215-220.
https://doi.org/10.3182/20130918-4-JP-3022.00062

Vahid Hassani, Antonio M. Pascoal, and A. Pedro Aguiar, "***Multiple Model Adaptive Estimation for Open Loop Unstable Plants***," Proc. ECC'13 - European Control Conference, Zurich, Switzerland, 17-19 July 2013.

Vahid Hassani, Antonio Pascoal, Asgeir J. Sørensen, "***A Novel Methodology for Adaptive Wave Filtering of Marine Vessels: Theory and Experiments***," Proc. 52nd IEEE Conference on Decision and Control, Florence, Italy, Dec. 10-13, 2013.
https://doi.org/10.1109/CDC.2013.6760863

Jorge M. Soares, A. Pedro Aguiar, António M. Pascoal, and Alcherio Martinoli, "***Joint ASV/AUV Range-Based Formation Control: Theory and Experimental Results***," Proc. 2013 IEEE ICRA - International Conference on Robotics and Automation Karlsruhe, May 6 - 10, 2013.
https://doi.org/10.1109/ICRA.2013.6631378

Andreas Haeusler, Alessandro Saccon, A. Pedro Aguiar, John Hauser, Antonio Pascoal, "***Cooperative AUV Motion Planning using Terrain Information***," in Proc. OCEANS'13 IEEE/MTS Conference, Bergen, Norway, 10-14 June, 2013.
https://doi.org/10.1109/OCEANS-Bergen.2013.6608137

Vahid Hassani, Asgeir J. Sørensen, and António Pascoal, "***A Novel Methodology for Robust Dynamic Positioning of Marine Vessels: Theory and Experiments***," Proc. 2013 American Control Conference, June 17 - 19, Washington D.C., USA.
https://doi.org/10.1109/ACC.2013.6579896

2012

Francisco Curado Teixeira, Antonio Pascoal, Pramod Maurya, "***A Novel Particle Filter Formulation with Application to Terrain-Aided Navigation***," Proc. IFAC Workshop on Navigation, Guidance and Control of Underwater Vehicles (NGCUV'2012), Porto, Portugal, 10-12 April, 2012. IFAC-PapersOnLine, Volume 45, Issue 5, 2012, Pages 132-139.
https://doi.org/10.3182/20120410-3-PT-4028.00023

Pramod Maurya, Francisco Curado Teixeira, Antonio Pascoal, "***Complementary Terrain/Single Beacon-Based AUV Navigation***," Proc. IFAC Workshop on Navigation, Guidance and Control of Underwater Vehicles (NGCUV'2012), Porto, Portugal, 10-12 April, 2012. IFAC-PapersOnLine, Volume 45, Issue 5, 2012, Pages 76-83.
https://doi.org/10.3182/20120410-3-PT-4028.00014

Jorge Soares, A. Pedro Aguiar, António Pascoal, and Marco Gallieri, "***Triangular formation control using range measurements: an application to marine robotic vehicles***," Proc. IFAC Workshop on Navigation, Guidance and Control of Underwater Vehicles (NGCUV'2012), Porto, Portugal, 10-12 April, 2012. IFAC-PapersOnLine, Volume 45, Issue 5, 2012, Pages 112-117.
https://doi.org/10.3182/20120410-3-PT-4028.00020

Alessandro Saccon, A. Pedro Aguiar, Andreas J. Hausler, John Hauser, and Antonio M. Pascoal, "***Constrained Motion Planning for Multiple Vehicles on SE(3)***," Proc. 51st IEEE Conference on Decision and Control, Maui, Hawaii, USA, Dec. 10-13, 2012.
https://doi.org/10.1109/CDC.2012.6426697

Joao Almeida, Carlos Silvestre, and Antonio M. Pascoal, "***Observer based self-triggered control of an acyclic interconnection of linear plants***," Proc. 51st IEEE Conference on Decision and Control, Maui, Hawaii, USA, Dec. 10-13, 2012.
https://doi.org/10.1109/CDC.2012.6425948

João Almeida, Carlos Silvestre, and António M. Pascoal, "***Observer based self-triggered control of linear plants with unknown disturbances***," Proc. American Control Conference, Montreal, Canada, June 27-29, 2012.
https://doi.org/10.1109/ACC.2012.6315048

Vahid Hassani, Asgeir J. Sorensen, Antonio M. Pascoal, "***Robust Dynamic Positioning of Offshore Vessels using Mixed -μ Synthesis Part I: A Control System Design Methodology***," Proceedings of the 1st IFAC Workshop on Automatic Control in Offshore Oil and Gas Production, Norwegian University of Science and Technology, Trondheim, Norway, May 31 - June 1, 2012. IFAC-PapersOnLine, Volume 45, Issue 8, 2012, Pages 177-182.

https://doi.org/10.3182/20120531-2-NO-4020.00042

Vahid Hassani, Asgeir J. Sorensen, Antonio M. Pascoal," ***Robust Dynamic Positioning of Offshore Vessels using Mixed-μ Synthesis Part II: Simulation and Experimental Results***," Proceedings of the 2012 IFAC Workshop on Automatic Control in Offshore Oil and Gas Production, Norwegian University of Science and Technology, Trondheim, Norway, May 31 - June 1, 2012. IFAC-PapersOnLine, Volume 45, Issue 8, 2012, Pages 183-188.
https://doi.org/10.3182/20120531-2-NO-4020.00043

Vahid Hassani, Asgeir J. Sørensen, Antonio M. Pascoal and A. Pedro Aguiar," ***Multiple Model Adaptive Wave Filtering for Dynamic Positioning of Marine Vessels***," Proc. 2012 American Control Conference, Fairmont Queen Elizabeth, Montréal, Canada, June 27-29, 2012
https://doi.org/10.1109/ACC.2012.6315094.

Vahid Hassani, A. Sorensen, A. Pedro Aguiar, A. Pascoal, "***A Linear Design Model for Wave Filtering and Dynamic Positioning***," Proc. CONTROLO 2012 - 10th Portuguese Conference on Automatic Control, Madeira, Portugal, July 16-18, 2012.
http://www.apca.pt/publicacoes/6/paper76.pdf

Vahid Hassani, A. Sorensen, António Pascoal, N. T. Dong, "***Multiple Model Adaptive Dynamic Positioning***," Proc. MCMC 2012, 9th IFAC Conference on Manoeuvring and Control of Marine Craft, Arenzano, Italy, September 19-21, 2012. IFAC-PapersOnLine, Volume 45, Issue 27, 2012, Pages 55-60.
https://doi.org/10.3182/20120919-3-IT-2046.00010

Vahid Hassani, Asgeir J. Sorensen, Antonio M. Pascoal, "***Evaluation of Three Dynamic Ship Positioning Controllers: from Calm to Extreme Conditions***," Proc. IFAC Workshop on Navigation, Guidance and Control of Underwater Vehicles (NGCUV'2012), Porto, Portugal, 10-12 April, 2012. IFAC-PapersOnLine, Volume 45, Issue 5, 2012, Pages 158-163.
https://doi.org/10.3182/20120410-3-PT-4028.00027

Isaac Kaminer, Enric Xargay, Venanzio Cichella, Naira Hovakimyan, Antonio Pascoal, A. Pedro Aguiar, Vladimir Dobrokhodov, and Reza Ghabcheloo, "***Time-Critical Cooperative Path Following of Multiple UAVs: Case Studies***," Proc. Itzhack Y. Bar-Itzhack Memorial Symposium on Estimation, Navigation, and Spacecraft Control, Haifa, Israel, October 14-17, 2102.
https://doi.org/10.1007/978-3-662-44785-7_12

Andreas J. Häusler, Alessandro Saccon, A. Pedro Aguiar, John Hauser, António M. Pascoal, "***Cooperative Motion Planning for Multiple Autonomous Marine Vehicles***," Proc. MCMC 2012, 9th IFAC Conference on Manoeuvring and Control of Marine Craft, Arenzano, Italy, September 19-21, 2012. IFAC-PapersOnLine, Volume 45, Issue 27, 2012, Pages 244-249.
https://doi.org/10.3182/20120919-3-IT-2046.00042

Francisco Curado Teixeira, Joao Quintas, Antonio Pascoal, "***AUV Terrain-Aided Doppler Navigation using Complementary Filtering***," Francisco Curado Teixeira, Joao Quintas, Antonio Pascoal, Proc. MCMC 2012, 9th IFAC Conference on Manoeuvring and Control of Marine Craft, Arenzano, Italy, September 19-21, 2012.
IFAC-PapersOnLine, Volume 45, Issue 27, 2012, Pages 313-318.
https://doi.org/10.3182/20120919-3-IT-2046.00053

D. Salinas, A. Pascoal, J, Aranda, "***Surface Sensor Networks for Underwater Vehicle Positioning with Bearings-Only Measurements***," Proc. IEEE/RSJ International Conference on Intelligent Robots and Systems, Vilamoura, Portugal, October 7-12, 2012.
https://doi.org/10.1109/IROS.2012.6385616

Vahid Hassain and Antonio Pascoal, "***A Comprehensive Evaluation of Three Robust Adaptive Control Methodologies***," Proc. 20th Mediterranean Conference on Control & Automation (MED´2012), Barcelona, Spain, July 3-6, 2012.
https://doi.org/10.1109/MED.2012.6265684

V. Cichella, I. Kaminer, E. Xargay, V. Dobrokhodov, N. Hovakimyan, P. Aguiar, A. Pascoal, "***A Lyapunov-Based Approach for Time-Coordinated 3D Path-Following of Multiple Quadrotors in SO(3)***", Proc. 51st IEEE Conference on Decision and Control, Maui, HI, USA, pp. 1776-1781, Dec. 2012.
https://doi.org/10.1109/CDC.2012.6425933

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