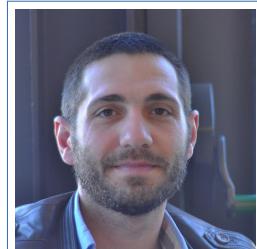


Antonio Ferramosca

Curriculum Vitae

University of Bergamo
Via Marconi 5, 24044
Dalmine, Bergamo, Italy
☎ +39 3495545616
📠 +39 035.2052.004

✉ antonio.ferramosca@unibg.it
🌐 www.antonioferramosca.com



Info

Birth 25-03-1982 (Maglie, Lecce, Italy)

Marital Married. Two children.

Status

Citizenship Italian

ORCID <http://orcid.org/0000-0003-3935-9734>

ResearchGate https://www.researchgate.net/profile/Antonio_Ferramosca

Scopus <https://www.scopus.com/authid/detail.uri?authorId=26430530700>

Google Scholar <https://scholar.google.com/citations?user=tRpe9cIAAAJ&hl=es&oi=ao>

LinkedIn <https://www.linkedin.com/in/antonio-ferramosca-17a8b739>

Profile

I was born in Maglie (LE), Italy, in 1982. I received the Bachelor Degree (Laurea Triennale) in Computer Science Engineering, and the Master Degree (Laurea Specialistica) in Automation both from the University of Pavia (Italy), respectively in 2004 and in 2006; and the Ph.D. degree in Automation, Robotics and Telematics, with full marks and honors (summa cum laude), from the University of Seville (Spain) in 2011. My thesis, titled “Model Predictive Control for Systems with Changing Setpoints”, was supervised by Prof. Dr. Eduardo F. Camacho and Prof. Dr. Daniel Limon. From September 2013 to December 2016 I have been Assistant Researcher at the Argentinean National Scientific and Technical Research Council (CONICET), and from January 2017 to June 2020 I have been Associate Researcher at the same institution. From April 2018 to June 2020 I have also been Adjunct Professor at the National Technological University (UTN), Faculty of Reconquista (Santa Fe, Argentina). I am currently fixed-term tenure track Associate Professor (Ricercatore a tempo determinato - lettera B) at the Department of Management, Information and Production Engineering, University of Bergamo, Italy. I am author and co-author of more than 80 publications including book chapters, journal papers, industrial reports and conference papers (Google Scholar H-Index: 17. Scopus H-Index: 15). My research interests include dynamic systems and control, Model Predictive Control, Economic MPC, Distributed MPC, process control, control of biological systems, stability, robust control. My Erdos number is 4.

Experience

Academic Positions

- 07/2020- Present **Fixed-Term Tenure Track Associate Professor (RTD-B)**, Department of Management, Information and Production Engineering, University of Bergamo, Bergamo, Italy.
- 01/2017- 06/2020 **Associate Researcher**, Argentinean National Scientific and Technical Research Council (CONICET), Santa Fe, Argentina.
- 04/2018- 06/2020 **Adjunct Professor**, National Technological University (UTN), Faculty of Reconquista, Reconquista, Santa Fe, Argentina.
- 09/2013- 12/2016 **Assistant Researcher**, Argentinean National Scientific and Technical Research Council (CONICET), Santa Fe, Argentina.
- 04/2012- 08/2013 **Postdoctoral Fellow**, Argentinean National Scientific and Technical Research Council (CONICET), Santa Fe, Argentina.
- 06/2011- 12/2011 **Postdoctoral Fellow**, University of Seville, School of Engineering, Department of Systems and Automation, Seville, Spain.
- 04/2007- 05/2011 **Ph.D. Student (FPU grant)**, University of Seville, School of Engineering, Department of Systems and Automation, Seville, Spain.
- 10/2006- 03/2007 **Hired research staff**, University of Seville, School of Engineering, Department of Systems and Automation, Seville, Spain.

As a Visiting Researcher

- 03/2015- 07/2015 **Academic Guest**, University of Seville, School of Engineering, Department of Systems and Automation, Seville, Spain.
- 09/2010- 03/2011 **Academic guest as Ph.D. Student**, INTEC, Department of Process Control, Universidad del Litoral, Santa Fe, Argentina.
- 08/2009- 02/2010 **Academic guest as Ph.D. Student**, University of Wisconsin, Madison, Department of Chemical and Biological Engineering, Madison (WI), USA.

Teaching

Undergraduate Teaching

- 2020-2021 **Dynamic Systems Identification**, 60h, University of Bergamo, Engineering and Management for Health, Bergamo, Italia.
- 2020-2021 **Data Analysis Lab**, 24h, University of Bergamo, Engineering and Management for Health, Bergamo, Italia.
- 2020-2021 **Ingegneria dei sistemi di controllo**, 3h, University of Bergamo, Computer Science Engineering, Bergamo, Italia.
- 2020 **Dynamic Systems and Automatic Control - Theory and practice**, 120h, National Technological University (UTN), Faculty of Reconquista, Reconquista, Santa Fe, Argentina.
Calculus 1, 96h, National Technological University (UTN), Faculty of Reconquista, Reconquista, Santa Fe, Argentina.
- 2019 **Dynamic Systems and Automatic Control - Theory and practice**, 120h, National Technological University (UTN), Faculty of Reconquista, Reconquista, Santa Fe, Argentina.

Calculus 1, 96h, National Technological University (UTN), Faculty of Reconquista, Reconquista, Santa Fe, Argentina.

2018 **Dynamic Systems and Automatic Control - Theory and practice**, 120h, National Technological University (UTN), Faculty of Reconquista, Reconquista, Santa Fe, Argentina.

2009-2010 **Dynamic Systems - Theory and practice**, 48h, University of Seville, School of Engineering, Seville, Spain.

2008-2009 **Dynamic Systems - Lab practice**, 8h, University of Seville, School of Engineering, Seville, Spain.

Automatic Control - Lab practice, 32h, University of Seville, School of Engineering, Seville, Spain.

Computer based Control - Lab practice, 10h, University of Seville, School of Engineering, Seville, Spain.

[**Graduate Teaching, Invited Talks, Seminary**](#)

11/2019 **Adaptive Control and Nonlinear Systems**, 30h, National Technological University (UTN), Faculty of Santa Fe, Santa Fe, Argentina.
Graduate School Course

09/2019 **Economic Model Predictive Control**, 10h, University of Seville, School of Engineering, Seville, Spain.
Graduate School Course

04/2019 **Impulsive MPC for Glucose Regulation in T1DM patients**, 1h, National Technological University (UTN), Faculty of Reconquista, Reconquista, Santa Fe, Argentina.
Seminary

04/2018 **Adaptive Control and Nonlinear Systems**, 30h, National Technological University (UTN), Faculty of Santa Fe, Santa Fe, Argentina.
Graduate School Course

02/2018 **Economic Model Predictive Control**, 6h, Univerisdade Federal de Minas Gerais, Belo Horizonte, Brazil.
Graduate School Course

11/2016 **Economic Model Predictive Control**, 6h, University of Seville, School of Engineering, Seville, Spain.
Graduate School Course

04/2016 **Economic Model Predictive Control**, 20h, Universidade Federal de Santa Catarina, Florianopolis, Brasil.
Graduate School Course

09/2015 **Model Predictive Control for Tracking**, 3h, Università del Salento, Lecce, Italy.
Seminary

05/2015 **Multi-model Economic Model Predictive Control**, 2h, Universidad de Sevilla, Seville, Spain.
Seminary

08/2013 **Nonlinear Control Systems**, 32h, Universidad Tecnológica Nacional, Facultad Regional de Paraná, Argentina.
Graduate School Course

- 03/2013 **Distributed Model Predictive Control**, 3h, Universidade de Sao Paulo, Sao Paulo, Brazil.
Seminary
- 10/2010 **MPC for tracking**, 2h, INTEC (CONICET - UNL), Santa Fe, Argentina.
Seminary
- 10/2009 **MPC for tracking**, 2h, University of Wisconsin, Madison, Department of Chemical and Biological Engineering, Madison (WI), USA.
Seminary

Human Resources Formation

Ph.D. Students

- 2019-Present **Iuro Nascimento**, *Universidade Federal de Minas Gerais*, Belo Horizonte, Brazil.
Co-Supervisor
- 2018-Present **Marcelo Alves dos Santos**, *Universidade Federal de Minas Gerais*, Belo Horizonte, Brazil.
Co-Supervisor
- 2018-Present **Martín Alarcón**, *Universidad Nacional del Litoral*, Santa Fe, Argentina.
Supervisor
- 2017-Present **Pablo Abuin**, *Universidad Nacional del Litoral*, Santa Fe, Argentina.
Co-Supervisor
- 2015-2019 **Agustina D'Jorge**, *Universidad Nacional del Litoral*, Santa Fe, Argentina.
Co-Supervisor

M.Sc. Students

- 2017-2019 **Iuro Nascimento**, *Universidade Federal de Minas Gerais*, Belo Horizonte, Brazil.
Co-Supervisor
- 2016-2018 **Marcelo Alves dos Santos**, *Universidade Federal de Minas Gerais*, Belo Horizonte, Brazil.
Co-Supervisor

B.Sc. Students

- 2019-2020 **Federico Lorenzón Cian**, *Universidad Tecnológica Nacional - FR Reconquista*, Reconquista, Santa Fe, Argentina.
Supervisor
- 2019-2020 **Rodrigo Alracón**, *Universidad Tecnológica Nacional - FR Reconquista*, Reconquista, Santa Fe, Argentina.
Supervisor

Education

- 2008-2011 **Doctorate in Engineering**, *University of Seville, School of Engineering*, Seville, Spain.
Final mark: 10/10 (summa cum laude)
- 2006-2007 **Master's degree in Automation, Robotics, and Telematics**, *University of Seville, School of Engineering*, Seville, Spain.
Final mark: 9/10

- 2004-2006 **Master's degree (Laurea Specialistica) in Computer Science Engineering: Automation**, University of Pavia, School of Engineering, Pavia, Italy.
Final mark: 110/110
- 2001-2004 **Bachelor's degree (Laurea Triennale) in Computer Science Engineering**, University of Pavia, School of Engineering, Pavia, Italy.
Final mark: 110/110

Ph.D. Thesis

- Title *Model Predictive Control for systems with changing setpoints*
Supervisors Prof. Eduardo F. Camacho, Prof. Daniel Limon

Research

Projects: as Head of the Project

- 2019- Ongoing **PID-UTN-CCUTNRQ0006540: Design of IA algorithms for images inspection. Application to rational shepherding.**, *PID de UTN*, Argentina, ARS \$35.000,00, Project Leader.

- 2019- Ongoing **PID-UTN-ENUTNRQ0005536: Modelling of an house Microgrid. Feasibility study and design of automatic control strategies.**, *PID de UTN*, Argentina, ARS \$35.000,00, Project Leader.

- 2017-2020 **PICT-2016-0283: Stochastic Economic MPC applied to UAVs control**, CONICET- Mincyt a través de Foncyt, Argentina, ARS \$170.000,00, Project Leader.

- 2013-2016 **CAI+D 2012: Optimización Económica en Tiempo Real en el Marco de MPC**, INTEC - Funded by CONICET, ARS \$30.000,00 , Co-director.

Projects: as Part of the research team

- 2020- Ongoing **PID2019-106212RB-C41: Safe operation of strategic infrastructur based on constrained optimization.**, Universidad de Sevilla - Ministerio de Economía y Competitividad, EUR €205.000,00 , Researcher.

- 2018-2020 **TEC-APQ-03090-17: Estratégias de Controle Robusto Sujeito a Restrições para VANTs Convertíveis**, Universidade Federal de Minas Gerais - FAPEMIG, Brasil, BRL \$50.000,00, Researcher.

- 2017-2019 **PICT-2016-3613: Herramientas para la optimización del desempeño económico de controladores predictivos en la industria de refinación de petróleo**, CONICET- Mincyt a través de Foncyt, Argentina, ARS \$367.000,00, Researcher.

- 2016-2018 **CNPq-486440/2013-3: Robust Control Strategies of TiltRotor UAVs for Load Transportation Tasks**, Universidade Federal de Minas Gerais - CNPq, Brasil, BRL \$50.000,00, Researcher.

- 2016-2018 **DPI 2016: Operación Económica Basada en Datos de Sistemas Cyber-Físicos**, University of Seville - Funded by Ministerio de Economía y Competitividad, EUR €125.000,00 , External Research Team.

- 2015-2017 **TEC-APQ-02903-14: Design of TiltRotor UAVs for Load Transportation and Aerial Manipulation**, Universidade Federal de Minas Gerais - FAPEMIG, Brasil, BRL \$50.000,00, Researcher.

- 2013-2017 **Gestión Óptima de Edificios de Energía Cero**, University of Seville - Funded by Junta de Andalucía, EUR €200.000,00 , External Research Team.

2013-2015 **Desarrollo de una herramienta para el monitoreo y diagnóstico de Aplicaciones de Control Predictivo Multivariable. Aplicación a controladores de tipo predictivo, en las columnas de destilación de la refinería de YPF S.A. en Ensenada.**, Funded by YPF S.A., Y-TEC S.A., CONICET, USD \$147.600,00 , Researcher.

2013-2015 **PIP 2012: Control y optimización en tiempo real de procesos de ingeniería**, INTEC - CONICET - Funded by UNL, ARS \$225.000,00 , Researcher.

Projects: as Ph.D. Student

2010-2011 **Hyghly-Complex and Networked Control Systems (HYCON2)**, University of Seville - European Union, EUR €196.696,00, Graduate student.

2009-2011 **Networked Predictive Control**, University of Seville - Funded by European Union, EUR €534.699,00, Graduate student.

2008-2011 **Control y optimización de sistemas híbridos de energías renovables.** , University of Seville - Funded by Junta de Andalucía, EUR €300.000,00, Graduate student.

2006-2008 **Hybrid Control: Taming Heterogeneity and Complexity of Networked Embedded Systems (HYCON)**, University of Seville - Funded by European Union, EUR €176.000,00, Graduate student.

Publications

Journals	32 journal papers (peer review)
Books	6 book chapters (peer review)
Conferences	44 conference papers (peer review)
Industry	4 industrial deliverables

Citations indexes

	Citations	Last year	Citations/year (5 years)	H-Index
Scopus	783	123	94.2	15
WoS	562	86	74.6	14
Google Scholar	1184	206	148.2	18

Toolboxes

- 2015 MPC Monitoring and Diagnostic Toolbox. Co-programmer Property of YPF S.A. Private use
- 2011 MPC for tracking toolbox. Co-programmer Department of Systems and Automation Engineering, University of Seville. Private use

Languages

Self-assessment European level CEFR (C2 maximum evaluation)

		Understanding		Speaking		Writing	
		Listening	Reading	Interaction	Production		
Italian	Mother Tongue	<i>C2</i>	<i>C2</i>	<i>C2</i>	<i>C2</i>	<i>C2</i>	
Spanish	Second Language	<i>C2</i>	<i>C2</i>	<i>C2</i>	<i>C2</i>	<i>C2</i>	
English	Advanced	<i>C1</i>	<i>C1</i>	<i>B2</i>	<i>B2</i>	<i>C1</i>	

Additional Informations

Research groups and networks meberships

2020- **CONCO-TEAM**, *International Consortium on COVID-19.*

Actualidad

2019- **EMERGENTIA**, *International Consortium on UAV for safety tasks and load transportation.*

Actualidad 2018- **External member of de TEP-950 GEPOC**, *Grupo de Investigación en Estimación, Predicción, Optimización y Control*, Universidad de Sevilla, España.

Actualidad 2018- **Head of Grupo de Investigación en Programación, Electrónica y Control (GIPEC)**, UTN - Facultad Regional de Reconquista, Reconquista, Santa Fe, Argentina.

Actualidad 2015- **External member of Grupo de Investigación en Control Avanzado**, INTEC (CONICET-UNL), Santa Fe, Argentina.

2012-2015 **Member of Grupo de Investigación en Control Avanzado**, INTEC (CONICET-UNL), Santa Fe, Argentina.

2006-2011 **Member of TEP-116 AUTOM. Y ROB. INDUSTRIAL**, *Grupo de Automática y Robótica Industrial*, Universidad de Sevilla, España.

Editorial Committee Memberships: Journals

2018 - 2020 Optimal Control, Applications and Method (OCAM, Wiley), Special Issue on Economic and Distributed MPC - Guest Editor

Editorial Committee Memberships: Conferences

2020 27th Argentinean Conference on Automatic Control, AADECA 2020

2018 6th IFAC Conference on Nonlinear Model Predictive Control, NMPC'18

2018 26th Argentinean Conference on Automatic Control, AADECA 2018

2016 25th Argentinean Conference on Automatic Control, AADECA 2016

Thesis Committees

07/2020 **Jesus Gomez Bellido**, Ph.D. Degree, Universidad de Sevilla, Spain.

07/2020 **José Maria Manzano Crespo**, Ph.D. Degree, Universidad de Sevilla, Spain.

07/2020 **Gabriel Viana Pacheco**, Master Degree, Universidade Federal de Minas Gerais, Belo Horizonte, Brasil.

05/2020 **Nestor Nahuel Deniz**, Ph.D. Degree, Universidad Nacional del Litoral, Santa Fe, Argentina.

11/2019 **Iuro Nascimento**, Master Degree, Universidade Federal de Minas Gerais, Belo Horizonte, Brasil.

03/2019 **Lautaro Braccia**, Ph.D. Degree, CONICET- Universidad Nacional de Rosario, Rosario, Argentina.

02/2018 **Marcelo Alves dos Santos**, Master Degree, Universidade Federal de Minas Gerais, Belo Horizonte, Brasil.

02/2017 **Filiberto Fele**, Ph.D. Degree, Universidad de Sevilla, Spain.

04/2016 **Richard Alfonso Andrade Alfaro**, Master Degree, Universidade Federal de Santa Catarina, Florianopolis, Brasil.

Reviewer Activity

Journals	Automatica, IEEE TAC, Journal of Process Control, Systems and Control Letters, Control Engineering Practice, IEEE TIE, International Journal of Control, International Journal of Systems Science, RIAI, Nonlinear Analysis: Hybrid Systems, OCAM, Journal of the Franklin Institute
Conferences	IFAC World Congress, CDC, ECC, ACC, NMPC, NOLCOS, AADECA, RPIC

Other Merits

- 04/2018 **Qualification as Associate Professor (Abilitazione Nazionale professore di Seconda Fascia), Italian Ministry of Instruction, University and Research (MIUR), Italy.**
- 11/2017 **Qualification as Associate Professor (Acreditación Nacional), Spanish Ministry of Education, Culture and Sports (MECD), Spain.**
- 08/2017 **Consular Correspondent for the Italian Consulate in Rosario, Italian Consulate in Rosario (Santa Fe), Argentina.**

Publications

Journal articles (peer review)

- [1] A. H. González, P.S. Rivadeneira, A. Ferramosca, N. Magdelaine, and C. H. Moog. Stable Impulsive Zone MPC for Type 1 Diabetic Patients based on a long-term model. *Optimal Control Applications and Methods*, 2020. DOI: <https://doi.org/10.1002/oca.2647>.
- [2] A. Ferramosca and T. Faulwasser. Editorial Model Predictive Control for Energy Systems: Economic and Distributed Approaches. *Optimal Control Applications and Methods*, 41(1):1–2, 2020. Special Issue: MPC for Energy Systems. Economic and Distributed Approach. Guest Editors: A. Ferramosca and T. Faulwasser.
- [3] A. D’Jorge, B. F. Santoro, A. Anderson, A. H. González, and A. Ferramosca. Stochastic model predictive control for tracking linear systems. *Optimal Control Applications and Methods*, 41(1):65–83, 2020. Special Issue: MPC for Energy Systems. Economic and Distributed Approach. Guest Editors: A. Ferramosca and T. Faulwasser.
- [4] A. Anderson, A. H. Gonzalez and A. Ferramosca, and E. A. Hernandez-Vargas. Characterization of SARS-CoV-2 Dynamics in Host. *Communications in nonlinear science and numerical simulations*, -(-):–, 2020. In press. DOI: 10.1016/j.cnsns.2020.105586.
- [5] P. Abuin, P.S. Rivadeneira, A. Ferramosca, and A. H. González. Artificial pancreas under stable pulsatile MPC: improving the closed-loop performance. *Journal of Process Control*, 92(8):246–260, 2020.
- [6] P. Abuin, A. Anderson, A. Ferramosca, E. A. Hernandez-Vargas, and A. H. González. Characterization of SARS-CoV-2 Dynamics in Host. *Annual Reviews in Control*, -(-):–, 2020. DOI: <https://doi.org/10.1016/j.arcontrol.2020.9.008>.
- [7] M. Santos, A. Ferramosca, and G. V. Raffo. Tube-based MPC with Nonlinear Control for Load Transportation using a UAV. *IFAC-PapersOnLine*, 51(25):459–465, 2018.
- [8] P. S. Rivadeneira, A. Ferramosca, and A. H. González. Control Strategies for Non-zero Set-point Regulation of Linear Impulsive Systems. *IEEE Transactions on Automatic Control*, 63(9):2994–3001, 2018.

- [9] D. Limon, A. Ferramosca, I. Alvarado, and T. Alamo. Nonlinear MPC for tracking piece-wise constant reference signals. *IEEE Transactions on Automatic Control*, 63(11):3735–3750, 2018.
- [10] A. D’Jorge, A. Anderson, A. H. González, and A. Ferramosca. A robust Economic MPC for Changing Economic Criterion. *International Journal of Robust and Nonlinear Control*, 28(15):4404–4423, 2018.
- [11] A. Anderson, A. H. González, A. Ferramosca, and E. Kofman. Finite-time convergence results in robust Model Predictive Control. *Optimal Control Applications and Methods*, 39(5):1627–1637, 2018.
- [12] A. Anderson, A. H. González, A. Ferramosca, A. D’Jorge, and E. Kofman. Robust MPC suitable for closed-loop re-identification, based on probabilistic invariant sets. *Systems & Control Letters*, 118(8):84–93, 2018.
- [13] M. A. Santos, B. S. Rego, G. V. Raffo, and A. Ferramosca. Suspended Load Path Tracking Control Strategy using a Tilt-rotor UAV. *Journal of Advanced Transportation*, 2017.
- [14] A. I. Hinojosa, A. Ferramosca, A. H. González, and D. Odloak. One-layer gradient-based MPC+RTO of a propylene/propane splitter. *Computers and Chemical Engineering*, 106:160–170, 2017.
- [15] A. H. González, P. S. Rivadeneira, A. Ferramosca, N. Magdelaine, and C. H. Moog. Impulsive zone mpc for type i diabetic patients based on a long-term model. *IFAC-PapersOnLine*, 50(1):14729–14734, 2017.
- [16] J. L. Godoy, A. Ferramosca, and A. H. González. Economic performance assessment and monitoring in LP-DMC type controller applications. *Journal of Process Control*, 57:26–37, 2017.
- [17] A. Ferramosca, A. H. González, and D. Limon. Offset-free multi-model Economic Model Predictive Control for Changing Economic Criterion. *Journal of Process Control*, 54:1–13, 2017.
- [18] A. D’Jorge, A. Ferramosca, and A. H. González. A robust gradient-based MPC for integrating Real Time Optimizer (RTO) with control. *Journal of Process Control*, 54:65–80, 2017.
- [19] G. A. Bustos, A. Ferramosca, J. L. Godoy, and A. H. González. Application of Model Predictive Control suitable for closed-loop re-indentification to a polymerization reactor. *Journal of Process Control*, (44):1–13, 2016.
- [20] A. Anderson, A. Ferramosca, A. H. González, and E. Kofman. Probabilistic Invariant Sets for Closed-Loop Re-Identification. *IEEE Latin America Transactions*, 14(6):2744–2751, 2016.
- [21] P. S. Rivadeneira, A. Ferramosca, and A. H. González. Mpc with state window target control in linear impulsive systems. *IFAC-PapersOnLine*, 48(23):507–512, 2015.
- [22] A. G. Marchetti, A .Ferramosca, and A. H. González. Steady-state target optimization designs for integrating real-timeoptimization and model predictive control. *Journal of Process Control*, 24(1):129–145, 2014.

- [23] A. H. González, A. Ferramosca, G. A. Bustos, J. L. Marchetti, M. Fiacchini, and D. Odloak. Model predictive control suitable for closed-loop re-identification. *Systems and Control Letters*, 69(7):23–33, July 2014.
- [24] A. Ferramosca, D. Limon, and E. F. Camacho. Economic MPC for a Changing Economic Criterion for Linear Systems. *IEEE Transactions on Automatic Control*, 59(10):2657–2667, October 2014.
- [25] A. Ferramosca, A. H. González, D. Limón, G. A. Bustos, J. L. Godoy, and J. L. Marchetti. On economic optimality of model predictive control. *IEEE Latin America Transactions*, 12(7):1234–1241, November 2014.
- [26] T. Alamo, A. Ferramosca, A. H. González, D. Limon, and D. Odloak. A gradient-based strategy for the one-layer RTO+MPC controller. *Journal of Process Control*, 24(4):435–447, 2014.
- [27] A. Ferramosca, D. Limon, I. Alvarado, and E. F. Camacho. Cooperative distributed MPC for tracking. *Automatica*, 49(4):906–914, 2013.
- [28] A. Ferramosca, J. K. Gruber, D. Limon, and E. F. Camacho. Control predictivo para seguimiento de sistemas no lineales. aplicación a una planta piloto. *Revista Iberoamericana de Automática e Informática Industrial*, 10(1):18 – 29, 2013.
- [29] A. Ferramosca, D. Limon, A. H. González, I. Alvarado, and E. F. Camacho. Robust MPC for tracking zone regions based on nominal predictions. *Journal of Process Control*, 22(10):1966–1974, 2012.
- [30] A. Ferramosca, D. Limon, I. Alvarado, T. Alamo, F. Castaño, and E. F. Camacho. Optimal MPC for tracking of constrained linear systems. *Int. J. of Systems Science*, 42(8):1265–1276, August 2011.
- [31] A. Ferramosca, D. Limon, A. H. González, D. Odloak, and E. F. Camacho. MPC for tracking zone regions. *Journal of Process Control*, 20(4):506–516, 2010.
- [32] A. Ferramosca, D. Limon, I. Alvarado, T. Alamo, and E. F. Camacho. MPC for tracking with optimal closed-loop performance. *Automatica*, 45(8):1975–1978, 2009.
- Book chapters (peer review)**
- [33] P. S. Rivadeneira, J. L. Godoy, J. E. Serenoa, P. Abuin, A. Ferramosca, and A. H. González. Impulsive mpc schemes for biomedical processes. application to type 1 diabetes. In Ahmad Taher Azar, editor, *Control applications for Biomedical Engineering Systems*, pages 391–449. ELSEVIER, 2020.
- [34] R. Ledesma, J. M. Rubio, A. Ferramosca, and C. Paetz. Sistemas domóticos inalámbricos. In *Z-Wave. Domótica para Ingenieros*, pages 101–130. Ediciones Paraninfo, 2015. In Spanish.
- [35] A. Ferramosca, D. Limon, and A. H. González. Cooperative Distributed MPC integrating a Steady State Target Optimizer (SSTO). In R. Negenborn and J. M. Maestre, editors, *Distributed MPC Made Easy*, pages 569–584. Springer, 2014.
- [36] A. Ferramosca. Cooperative model predictive control with guaranteed exponential stability. In R. Negenborn and J. M. Maestre, editors, *Distributed MPC Made Easy*, pages 585–600. Springer, 2014.

- [37] D. Limon, A. Ferramosca, I. Alvarado, T. Alamo, and E. F. Camacho. MPC for tracking of constrained nonlinear systems. In L. Magni, D. M. Raimondo, and F. Allgöwer, editors, *Nonlinear Model Predictive Control - Towards New Challenging Applications*, pages 315–323. Springer, 2009.

- [38] D. Limon, T. Alamo, D. M. Raimondo, D. Muñoz de la Peña, J. M. Bravo, A. Ferramosca, and E. F. Camacho. Input-to-state stability: an unifying framework for robust model predictive control. In L. Magni, D. M. Raimondo, and F. Allgöwer, editors, *Nonlinear Model Predictive Control - Towards New Challenging Applications*, pages 1–26. Springer, 2009.

Conference papers (peer review)

- [39] J. D. Vergara-Diertrich, A. Ferramosca, V. Mirasierra, J. E. Normey-Rico, and D. Limon. A Modifier-Adaptation Approach to the One-Layer Economic MPC. In *21th IFAC World Congress*, Berlin, Germany, July, 11-17 2020.
- [40] A. Anderson, A. H. González, A. Ferramosca, and E. Hernández-Vargas. Discrete-time switching MPC with applications to mitigate resistance in viral infections. In *21th IFAC World Congress*, Berlin, Germany, July, 11-17 2020. Invited Session.
- [41] I. Sanchez, A. Ferramosca, G. Raffo, A. H. González, and A.D'Jorge. Obstacle Avoiding Path Following based on Nonlinear Model Predictive Control using Artificial Variables. In *19th International Conference on Advanced Robotics (ICAR)*, Belo Horizonte, Brasil, December, 2-6 2019.
- [42] I. Sanchez, A.D'Jorge, A. Ferramosca, G. Raffo, and A. H. González. Model Predictive Path Following and Trajectory Tracking Control using Artificial Variables for Constrained Vehicles. In *18th Workshop on Information Processing and Control (RPIC)*, Bahia Blanca, Argentina, September, 18-20 2019.
- [43] I. B. P. Nascimento, A. Ferramosca, L. Pimenta, and G. Raffo. NMPC Strategy for a Quadrotor UAV in a 3D Unknown Environment. In *Anais do 14º Simpósio Brasileiro de Automação Inteligente SBAI 2019*, Ouro Preto, Brasil, October, 27-30 2019.
- [44] I. B. P. Nascimento, A. Ferramosca, L. Pimenta, and G. Raffo. NMPC Strategy for a Quadrotor UAV in a 3D Unknown Environment. In *19th International Conference on Advanced Robotics (ICAR)*, Belo Horizonte, Brasil, December, 2-6 2019.
- [45] P. Abuin, J. L. Godoy, P. S. Rivadeneira, A. Ferramosca, and A. H. González. Control by pulses under MPC schemes, with applications to artificial pancreas. In *18th Workshop on Information Processing and Control (RPIC)*, Bahia Blanca, Argentina, September, 18-20 2019.
- [46] M. Santos, A. Ferramosca, and G. V. Raffo. Tube-based MPC with Nonlinear Control for Load Transportation using a UAV. In *9th IFAC Symposium on Robust Control Design, ROCOND 2018*, September, 1-3 2018.
- [47] A. D'Jorge, A. Anderson, A. H. González, and A. Ferramosca. Robust and Stochastic MPC for tracking: a performance comparison. In *26º Congreso Argentino de Control Automático, AADECA 2018*, November, 7-9 2018.
- [48] A. Anderson, A. H. González, A. Ferramosca, and E. Kofman. Finite-time convergence results in robust Model Predictive Control. In *European Control Conference, ECC 2018*, June 12-15 2018.

- [49] A. Anderson, A. D’Jorge, A. Ferramosca, E. Kofman, and A. H. González. i-Steps Closed-Loop Sets for Constrained Linear Systems under Model Predictive Control. In *26º Congreso Argentino de Control Automático, AADECA 2018*, November, 7-9 2018.
- [50] P. S. Rivadaneira, M. A. Caicedo, A. H. González, and A. Ferramosca. Impulsive Zone Model Predictive Control (iZMPC) for Therapeutic Treatments: Application to HIV Dynamic (I). In *56th Conference on Decision and Control, CDC 2017*, Melbourne, Australia, December, 12-15 2017. Invited Session.
- [51] A. H. González, P. S. Rivadaneira, A. Ferramosca, N. Magdaleine, and Claude H. Moog. Impulsive Zone MPC for Type I Diabetic Patients based on a long-term model. In *20th IFAC World Congress*, Toulouse, France, July, 9-14 2017.
- [52] B. F. Santoro, A. Ferramosca, A. H. González, and D. Odloak. A zone control strategy for stochastic model predictive control. In *2016 American Control Conference, ACC 2016*, July 6-8 2016.
- [53] P. S. Rivadeneira, A. H. González, and A. Ferramosca. Impulsive zone model predictive control with application to type i diabetic patients. In *IEEE Multi-Conference on Systems and Control, MSC 2016*, September 19-22 2016.
- [54] J. L. Godoy, A. Ferramosca, A. H. González, G. A. Bustos, and J. E. Normey-Rico. Tuning Methodology for Industrial Predictive Controllers Applied to Natural Gas Processing Unit. In *IEEE Multi-Conference on Systems and Control, MSC 2016*, September 19-22 2016.
- [55] A. D’Jorge, A. Anderson, A. H. González, and A. Ferramosca. A Robust Economic MPC for Changing Economic Criterion. In *IEEE Multi-Conference on Systems and Control, MSC 2016*, September 19-22 2016.
- [56] A. Anderson, A.H. González, , and A. Ferramosca E. Kofman. Extende MPC for closed-loop re-identification based on probabilistic invariant sets. In *25th Argentinean Conference on Automatic Control, AADECA 2016*, November, 1-3 2016.
- [57] P. S. Rivadeneira, A. Ferramosca, and A. H. González. Mpc with state window target control in linear impulsive systems. In *5th Conference on Nonlinear Model Predictive Control, NMPC’15*, September 17-20 2015.
- [58] A. Ferramosca, A. H. González, and D. Limon. Economic optimality in MPC: A comparative study. In *American Control Conference (ACC)*, pages 2555–2560. IEEE, July 2015.
- [59] A. D’Jorge, A. Ferramosca, and A. H. González. A robust gradient-based MPC for integrating real time optimizer (RTO) with control. In *16th Workshop on Information Processing and Control (RPIC)*, October 2015.
- [60] A. Anderson, A. Ferramosca, A.H. González, and E. Kofman. Probabilistic invariant set for closed-loop re-identification. In *16th Workshop on Information Processing and Control (RPIC)*, October 2015.
- [61] A. Ferramosca, A. H. González, D. Limón, and D. Odloak. One-layer robust MPC: a multi-model approach. In *19th IFAC World Congress*, pages 11067–11072, Cape Town, South Africa, August 2014. Invited Session.

- [62] A. Ferramosca, A. H. González, D. Limón, G. A. Bustos, J. L. Godoy, and J. L. Marchetti. On economic optimality of model predictive control. In *24th Argentinean Conference on Automatic Control, AADECA 2014*, Buenos Aires, Argentina, October 2014.
- [63] D. Limon, T. Alamo, M. Pereira, A. Ferramosca, A. H. González, and D. Odloak. Integrating the RTO in the MPC: an adaptive gradient-based approach. In *Proceedings of the European Control Conference*, pages 7–12, Zürich, Switzerland., July 17-19 2013.
- [64] A. H. González, A. Ferramosca, G. A. Bustos, J. L. Marchetti, and D. Odloak. Model predictive control suitable for closed-loop re-identification. In *Proceedings of the American Control Conference (ACC)*, 2013.
- [65] G. A. Bustos, A. H. González, A. Ferramosca, and J. L. Marchetti. Application of model predictive control suitable for closed loop re-identification to a polymerization reactor. In *15th Workshop on Information Processing and Control (RPIC)*, 2013.
- [66] D. Limon, A. Ferramosca, T. Alamo, A. H. González, and D. Odloak. Model predictive control for changing economic targets. In *Proceeding of 4th IFAC Nonlinear Model Predictive Control Conference - NMPC '12*, pages 384–391, Noordwijkerhout, NL, August 23-27 2012.
- [67] A. H. González, G. A. Bustos, A. Ferramosca, and J. L. Marchetti. Model predictive control suitable for closed-loop re-identification. In *23th Argentinean Conference on Automatic Control - AADECA 2012*, Buenos Aires, Argentina, October, 3-5 2012.
- [68] A. Ferramosca, D. Limon, and A. H. González. DistributedI MPC for tracking. Application to a 4 tank plant. In *23th Argentinean Conference on Automatic Control - AADECA 2012*, Buenos Aires, Argentina, 2012.
- [69] T. Alamo, A. Ferramosca, A. H. Gonzalez, D. Limon, and D. Odloak. A gradient-based strategy for integrating real time optimizer (RTO) with model predictive control (MPC). In *Proceedings of the 4th IFAC Nonlinear Model Predictive Control Conference - NMPC '12*, pages 33–38, Noordwijkerhout, NL, August 23-27 2012.
- [70] T. Alamo, A. Ferramosca, A. H. González, D. Limon, and D. Odloak. A gradient-based Economic MPC suitable for industrial applications. In *23th Argentinean Conference on Automatic Control - AADECA 2012*, Buenos Aires, Argentina, October, 3-5 2012.
- [71] A. Ferramosca, D. Limon, J. B. Rawlings, and E. F. Camacho. Cooperative distributed MPC for tracking. In *Proceedings of the 18th IFAC World Congress*, Milan, Italy, August 28 - September 2 2011.
- [72] D. Limon, I. Alvarado, A. Ferramosca, T. Alamo, and E. F. Camacho. Enhanced robust NMPC based on nominal predictions. In *Proceedings of the 8th IFAC Symposium on Nonlinear Control Systems, NOLCOS 2010*, Bologna, Italy, September, 1-3 2010.
- [73] A. Ferramosca, J. B. Rawlings, D. Limon, and E. F. Camacho. Economic MPC for a changing economic criterion. In *Proceedings of 49th IEEE Conference on Decision and Control, CDC 2010*, Atlanta, GE, USA, December, 15-17 2010.
- [74] A. Ferramosca, D. Limon, A. H. González, D. Odloak, and E. F. Camacho. MPC for tracking target sets. In *Proceedings of 48th IEEE Conference on Decision and Control, CDC 2009*, Shanghai, China, December, 16-18 2009.

- [75] A. Ferramosca, D. Limon, F. Fele, and E. F. Camacho. L-Band SBQP-based MPC for supermarket refrigeration systems. In *Proceedings of the European Control Conference, ECC 2009*, Budapest, Hungary, August, 23-26 2009.
- [76] A. Ferramosca, D. Limon, I. Alvarado, T. Alamo, and E. F. Camacho. MPC for tracking constrained nonlinear systems. In *Proceedings of 48th IEEE Conference on Decision and Control, CDC*, Shanghai, China, December, 16-18 2009.
- [77] D. Limon, A. Ferramosca, I. Alvarado, T. Alamo, and E. F. Camacho. MPC for tracking of constrained nonlinear systems. In *Proceedings of 3rd International Workshop on Assessment and Future Directions of Nonlinear Model Predictive Control, NMPC 2008*, Pavia, Italia, September, 5-9 2008.
- [78] A. Ferramosca, D. Limon, I. Alvarado, T. Alamo, and E. F. Camacho. Optimal MPC for tracking constrained linear systems. In *Proceedings of 8th Portuguese Conference on Automatic Control, CONTROLO 2008*, Vila Real, Portugal, July, 21-23 2008.
- [79] A. Ferramosca, D. Limon, I. Alvarado, T. Alamo, and E. F. Camacho. MPC for tracking with optimal closed-loop performance. In *Proceedings of 47th IEEE Conference on Decision and Control, CDC 2008*, Cancun, Mexico, December, 9-11 2008.
- [80] I. Alvarado, D. Limon, A. Ferramosca, T. Alamo, and E. F. Camacho. Robust tube-based MPC for tracking applied to the quadruple tank process. In *Proceedings of the IEEE International Conference on Control Applications, CCA 2008*, San Antonio, Texas, September, 3-5 2008.
- [81] A. Ferramosca, I. Alvarado, D. Limon, and E. F. Camacho. MPC para el seguimiento del ángulo de cabeceo de un helicóptero. In *XXVIII Jornadas de Automática*, Huelva, Spain, September, 05-07 2007.
- [82] C. Aurora, M. Diehl, A. Ferramosca, L. Magni, A. Miotti, and R. Scattolini. Nonlinear model predictive control for combined cycle power plants. In *Proceedings of the 6th IFAC Symposium on Nonlinear Control Systems - NOLCOS '04*, Stuttgart, Germany, September 1-3 2004.
- Industrial deliverables**
- [83] J. L. Marchetti, A. H. González, A. Ferramosca, and J. L. Godoy. Cuarto informe de seguimiento del proyecto de desarrollo: Herramientas para la evaluación del nivel de desempeño y diagnóstico de controladores multivariados. aplicación a controladores de tipo predictivo, en las columnas de destilación de la refinería de ypf s.a. en ensenada. Technical report, YPF S.A., Y-TEC S.A., CONICET, September 2015. In Spanish.
- [84] J. L. Marchetti, A. H. González, A. Ferramosca, and J. L. Godoy. Tercero informe de seguimiento del proyecto de desarrollo: Herramientas para la evaluación del nivel de desempeño y diagnóstico de controladores multivariados. aplicación a controladores de tipo predictivo, en las columnas de destilación de la refinería de ypf s.a. en ensenada. Technical report, YPF S.A., Y-TEC S.A., CONICET, Noviembre 2014. In Spanish.
- [85] J. L. Marchetti, A. H. González, A. Ferramosca, and J. L. Godoy. Segundo informe de seguimiento del proyecto de desarrollo: Herramientas para la evaluación del nivel de desempeño y diagnóstico de controladores multivariados. aplicación a controladores de tipo predictivo, en las columnas de destilación de la refinería de ypf s.a. en ensenada. Technical report, YPF S.A., Y-TEC S.A., CONICET, July 2014. In Spanish.

- [86] J. L. Marchetti, A. H. González, A. Ferramosca, and J. L. Godoy. Primero informe de seguimiento del proyecto de desarrollo: Herramientas para la evaluación del nivel de desempeño y diagnóstico de controladores multivariados. aplicación a controladores de tipo predictivo, en las columnas de destilación de la refinería de ypf s.a. en ensenada. Technical report, YPF S.A., Y-TEC S.A., CONICET, October 2013. In Spanish.
- Thesis**
- [87] A. Ferramosca. *Model Predictive Control for Systems with Changing Setpoints*. PhD thesis, Univ. de Sevilla., 2011. <http://fondosdigitales.us.es/tesis/autores/1537/>.
- Softwares**
- [88] J. L. Marchetti, A. H. González, A. Ferramosca, and J. L. Godoy. Herramientas para la evaluación del nivel de desempeño y diagnóstico de controladores multivariados. Property of YPF S. A. for private use., November 2015.
- [89] I. Alvarado, D. Limon, A. Ferramosca, and T. Alamo. MPC for tracking toolbox for matlab. For private use., June 2011.
- Pre-prints**
- [90] A. Anderson, A. H. González, A. Ferramosca, and E. A. Hernandez-Vargas. Discrete-time MPC for switched systems with applications to biomedical problems. *arXiv*, 2020. arXiv:2006.12936.
- [91] P. Abuin, A. Anderson, A. Ferramosca, E. A. Hernández-Vargas, and A. H. González. Characterization of SARS-CoV-2 Dynamics in the Host. *arXiv*, 2020. <http://arxiv.org/abs/2006.08447>.
- [92] A. Ferramosca A. H. González M. Actis A. D'Jorge, A. L. Anderson. On stability of nonzero set-point for non linear impulsive control systems. *arXiv*, 2020. arXiv:2011.12085.
- [93] A. Anderson, A. D'Jorge, A. H. González, A. Ferramosca, and M. Actis. MPC for tracking with maximum domain of attraction. *arXiv*, 2019. <http://arxiv.org/abs/1910.00608>.
- Under review journal articles**
- [94] I. Sanchez, A. Ferramosca, G. V. Raffo, A. H. González, and A. D'Jorge. Nonlinear Model Predictive Path Following Controller with Obstacle Avoidance. *Journal of Intelligent and Robotic Systems*, 2020. En revisión.
- [95] E. Masero, J. M. Maestre, A. Ferramosca, M. Francisco, and E. F. Camacho. Robust Coalitional MPC with Predicted Topology Transitions. *IEEE Transactions on Control of Network Systems*, 2020. En revisión.
- [96] A. Anderson, A. H. González, A. Ferramosca, and E. Hernández-Vargas. Discrete-time MPC for switched systems with applications to biomedical problems. *Communications in Nonlinear Science and Numerical Simulation*, 2020. En revisión.
- [97] P. Abuin, A. Anderson, A. Ferramosca, E. A. Hernández-Vargas, and A. H. González. Characterization of SARS-CoV-2 Dynamics in the Host. *Mathematical Bioscience*, 2020. En revisión.