

Rodrigo A. González

Control Systems Technology
Department of Mechanical Engineering
Eindhoven University of Technology, The Netherlands

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Personal Information

Full name: Rodrigo Alejandro González Vidal
Date of birth: 24th of September of 1992
Place of birth: Viña del Mar, Chile
Citizenship: Chilean
Professional Degree: Ingeniero Civil Electrónico (Electronics Engineer)

Education

- **KTH Royal Institute of Technology** Stockholm, Sweden
Ph.D. in Electrical Engineering Oct. 2017 - May 2022
 - Title: *Continuous-time System Identification: Refined Instrumental Variables and Sampling Assumptions*
 - Supervisor: Prof. Cristian R. Rojas
 - Opponent and Committee: Prof. Marion Gilson (Université de Lorraine, France), Dr. ir. John Lataire (VUB, Belgium), Prof. Tomas McKelvey (Chalmers, Sweden), Assoc. Prof. Roland Toth (TU Eindhoven, The Netherlands)
- **KTH Royal Institute of Technology** Stockholm, Sweden
Licentiate of Electrical Engineering Oct. 2017 - June 2020
 - Title: *Consistency and Efficiency in Continuous-time System Identification*
 - Supervisor: Prof. Cristian R. Rojas
 - Opponent: Prof. Hugues Garnier (Université de Lorraine, Nancy, France)
- **Universidad Técnica Federico Santa María** Valparaíso, Chile
Master of Science of Electronic Engineering (Major: Automatic Control) Mar. 2015 - Nov. 2016
 - Title: *Imposition of Causality and Passivity in Spectral Analysis* (in Spanish)
 - Supervisor: Prof. Ricardo A. Rojas
 - Committee: Ph.D. Ricardo A. Rojas (UTFSM, Chile), Ph.D. Cristian R. Rojas (KTH, Sweden), Ph.Dc. Patricio E. Valenzuela (KTH, Sweden), Ph.D. Daniel Sbarbaro (U. Concepción, Chile)
- **Universidad Técnica Federico Santa María** Valparaíso, Chile
Electronics Engineering Degree (6-year degree) Mar. 2011 - Nov. 2016
 - Supervisor: Prof. Ricardo A. Rojas
 - GPA: 92% (Maximum: 100%). Ranking: 1st out of 70 students

Research Experience

- **Assistant Professor** Eindhoven, The Netherlands
Department of Mechanical Engineering, TU/e March 2024 -
– Working in the Control Systems Technology Section.
- **Postdoctoral researcher** Eindhoven, The Netherlands
Department of Mechanical Engineering, TU/e June 2022 - February 2024
– Worked with Prof. Tom Oomen, as part of the Control Systems Technology Section.
- **Visiting Researcher** Valparaíso, Chile
Department of Electronics, UTFSM, and AC3E Dec. 2023 - Jan. 2024
– 4-week research visit to the group of Prof. J. C. Agüero. Also visited the Advanced Center for Electrical and Electronic Engineering (AC3E).
– Funded by the Chilean National Agency for Research and Development (ANID), grant ANID-FONDECYT 1211630.
- **Visiting Researcher** Valparaíso, Chile
Department of Electronics, UTFSM Dec. 2022 - Jan. 2023
– 4-week research visit to the group of Prof. J. C. Agüero.
– Funded by the Chilean National Agency for Research and Development (ANID), grant ANID-FONDECYT 1211630.
- **Ph.D. student** Stockholm, Sweden
Division of Decision and Control Systems, KTH Oct. 2017 - May 2022
– Under the supervision of Prof. Cristian R. Rojas.
- **Visiting Researcher** Newcastle, NSW, Australia
School of Electrical Engineering and Computing, University of Newcastle Nov. 2019 - Dec. 2019
– 5-week research visit to the group of Assoc. Prof. James Welsh.
– Funded by the Complex Dynamic Systems and Control (CDSC) Scholarship.
- **Reviewer** 2017 -
IEEE-IFAC
– Reviewer for IFAC Automatica Journal, Elsevier Signal Processing Journal, IEEE Transactions on Automatic Control, International Journal of Control, IEEE Control Systems Letters, International Journal of Robust and Nonlinear Control, IEEE Transactions on Control Systems Technology, IEEE/ASME Transactions on Mechatronics, Biomedical Signal Processing and Control, Control Engineering Practice, IFAC World Congress, IFAC Symposium on System Identification, , IEEE Conference on Decision and Control (CDC), American Control Conference (ACC), European Control Conference (ECC), and IEEE Conference on Control Technology and Applications (CCTA).
– Reviewer for the Fondecyt Research Initiation Project Competition, ANID, Chile.
– External reviewer of the MSc. Thesis of Cristóbal Huidobro, defended on January 3rd, 2024, at UTFSM, Valparaíso, Chile.
- **Research Assistant** Valparaíso, Chile
Department of Electronics, UTFSM Feb. 2017 - Sept. 2017
– Hired by Project FONDECYT 1161241, ‘Optimal estimation and control over communication channels subject to data loss’.
– Under the supervision of Prof. Francisco Vargas.
– Output: One conference paper (ECC2018), two journal papers (TAC and L-CSS).

- **Visitor** Stockholm, Sweden
Division of Decision and Control Systems, KTH Mar. 2016
 - 2-week research visit to the System Identification Group of KTH, invited by Prof. Cristian Rojas.
- **Research Intern** Berlin, Germany
Control Systems Group, TU Berlin Jan. 2016 - Feb. 2016
 - 8-week internship.
 - Funded by CONICYT's 'Scholarship for short internships abroad'.

Teaching and Supervision Experience

- **Lecturer** TU/e, The Netherlands
4CA20 'Signals and Systems' (Bachelor Course) Springs 2024-2025
- **Guest Lecturer** TU/e, The Netherlands
4CM40 'Physical and Data-driven Modelling' (Masters Course) Spring 2025
- **Supervisor of MSc. Theses** TU/e, The Netherlands
Master Program in Systems and Control 2024-2025
 - Thesis 2025: Jens Pierssens (with Coolgradient).
 - Thesis 2024: Rikuto Suzuki.
 - Thesis 2024: "Modal Identification of Multivariable Motion Systems" by Maarten van der Hulst (with ASML).
- **Teaching Assistant** TU/e, The Netherlands
4CM40 'Physical and Data-driven Modelling' (Masters Course) Springs 2023-2024
- **Teaching Assistant** TU/e, The Netherlands
4SC070 'Learning control' (Masters Course) Spring 2023
- **Teaching Assistant** KTH, Sweden
EL2820 'Modelling of Dynamical Systems' (Masters Course) Autumns 2018-2021
- **Supervisor of Bachelor Theses projects** KTH, Sweden
Bachelor Thesis Course, Electrical Engineering Program Springs 2018-2020
 - Project 2020: 'Stock Market Prediction with Deep Learning' by Kiar Fatah and Tariq Nazar.
 - Project 2019: 'Evaluating LASSO and ARIMA algorithms for financial forecasting', by Oskar Erlandsson and Andrej Wilczek.
 - Project 2018: 'Evaluating different algorithms for detecting change-points in time series', by Henrik Eriksson and Victor Löfgren.
- **Supervisor of MSc. Theses** KTH, Sweden
Master Program in System, Control and Robotics 2018-2021
 - Thesis 2021: 'Current Control and Modelling of an Inspiration Valve' by Astrid Lindstedt (with Getinge).
 - Thesis 2021: 'System Identification of continuous-time systems with quantized output data using indirect inference' by Frida Persson.
 - Thesis 2020: 'Inertial Domain Transfer using Generative Adversarial Networks' by Saieshwar Radhakrishnan (with Scania)
 - Thesis 2020: 'Adaptive Model Predictive Control for Reference Tracking Vehicle Motion' by Sven Grenholm (with Transrail)

- Thesis 2019: ‘Online maximum capacity estimation of a propulsion battery on heavy duty vehicles’, by Nikolaos Karavalakis (with Scania)
- Thesis 2018: ‘Hydraulic Closed Loop Control’, by Maria Elfving (with Volvo)

- **Teaching Assistant** Department of Electronics, UTFSM, Chile
ELO-370 ‘Automatic Control II’(Digital Control) 2nd Semester 2016
- **Teaching Assistant** Department of Electronics, UTFSM, Chile
ELO-104 ‘Linear Systems Analysis’ (four times) 2015 - 2016
- **Teaching Assistant** Department of Mathematics, UTFSM, Chile
MAT-024 ‘Multivariable Integration and PDEs’ 2nd Semester 2015
- **Teaching Assistant** Department of Mathematics, UTFSM, Chile
MAT-023 ‘Multivariable Differential Calculus and ODEs’ 1st Semester 2014
- **Teaching Assistant** Department of Physics, UTFSM, Chile
FIS-120 ‘Electromagnetism’ 2nd Semester 2013
- **Teaching Assistant** Department of Mathematics, UTFSM, Chile
MAT-021 ‘Algebra and Elementary Calculus’ 1st Semester 2013
- **Teaching Assistant** Department of Mathematics, UTFSM, Chile
MAT-022 ‘Linear Algebra and Single Variable Integration’ (twice) 2nd Semester 2012-2013

Other working experience

- **Core organizer of the Symposium ‘Identification, Control and Applications’** Valparaíso, Chile
UTFSM/AC3E 2023-2024
 - Organizer of both symposia, which have been held in January at UTFSM, Valparaíso, Chile.
 - Over 15 presentations from professors, researchers and PhD/MSc students from Lund University (Sweden), TU/e (The Netherlands), UTEM, USACH, UTFSM, and PUCV (Chile).
- **Volunteer in the organizing crew of SYSID’18** Stockholm, Sweden
KTH Royal Institute of Technology 2018
 - In charge of solving technical issues and support during the IFAC Symposium on System Identification (SYSID’18), held in Stockholm.
- **Report Assistant** Valparaíso, Chile
Department of Electronics, UTFSM 2016
 - Report assistant and member of the committee of the accreditation process of the Master of Science degree in Electronic Engineering.
 - After 1 year of work, we obtained 2 extra years of accreditation of the program (from 6 to 8).
- **Vicepresident of the Student Union** Valparaíso, Chile
Department of Electronics, UTFSM 2015
 - Vicepresident of the association of all ~650 students of Electronic and Telematic Engineering of the UTFSM. The position lasted one year.
- **Summer intern** Ventanas, Chile
Codelco, Ventanas Division Jan. 2015 - March. 2015
 - Summer intern for 8 weeks in the Refinement section of Codelco (National Corporation of Copper).
- **Summer intern** Santiago, Chile
Honeywell Chile S.A. Jan. 2014 - March. 2014

- Summer intern for 8 weeks in Honeywell Chile S.A., Advanced Process Control Area.

- **PSU practice test corrector**

Valparaíso, Chile

- *Admission team, UTFSM*

2011 - 2016

- In charge of the validation and listing of format and mathematical errors of the PSU (National University Selection Test) practice tests of the UTFSM.
- Over 30 practice exams validated.

Courses

- **Teaching Courses taken at TU/e, The Netherlands**

- TEACH890, Learn to Teach (Autumn 2023)
- TEACH950, Foundations (Spring 2024)
- YEARTH Academy, Interpersonal Communication (Spring 2024)
- AVK, Focus your online work - Inbox zero (Spring 2024)

- **Ph.D. Courses taken at KTH, Sweden:**

- FJL3380, Theoretical Foundations of Machine Learning (Spring 2019)
- FAK3127, The Sustainable Scientist (Spring 2019)
- FEL3202, Data Driven Modeling - Extended Course (Spring 2019)
- FEL3370, Mathematical Method in Signals, Systems and Control (Spring 2019)
- FAK3014, Theory and Methodology of Science (Spring 2019)
- FEM3200, Optimal Filtering (Autumn 2018)
- FEM3220, Matrix Algebra (Spring 2018)
- FDS3103, Introduction to Scientific Writing (Spring 2018)
- FSF3862, Nonlinear Systems, Analysis and Control (Spring 2018)
- FLH3000, Basic Communication and Teaching (Spring 2018)
- FEL3210, Multivariable Feedback Control Systems (Autumn 2017)
- FEF3301, Computational Game Theory (Autumn 2017)

- **MSc./Ph.D. Courses taken at UTFSM, Chile:**

- MAT235, Functional Analysis (attended lectures Semester 2017-1)
- MAT379, Optimization and Control (attended lectures Semester 2017-1)
- MAT263, Probability Theory and Stochastic Processes (attended lectures Semester 2016-1)
- MAT226, Measure Theory (attended lectures Semester 2015-2)
- MAT235, Complex Variables (Semester 2015-2)
- IPD476, Multivariable Control (Semester 2015-2)
- MAT225, Real Analysis (Semester 2015-1)
- IPD469, Models for Control (Semester 2015-1)
- IPD462, Advanced Design of Control Systems (Semester 2015-1)
- IPD468, System Dynamics (Semester 2014-2)
- IPD460, Information Theory (Semester 2014-2)

- IPD431, Probability and Random Processes (Semester 2014-1)
- IPD410, Mathematical Methods in Automatic Control (Semester 2013-2)

Merits and Awards

- **Recipient of the ‘Esfuerzo es Progreso’ Award** Valparaíso, Chile
UTFSM 2019
 – Testamentary donation/award given to the best Electronic Engineering student of UTFSM graduated in 2016.
- **Recipient of Complex Dynamic Systems and Control (CDSC) Scholarship** Newcastle, Australia
University of Newcastle, Australia 2019
 – Research scholarship of AUD \$5000 for visiting the University of Newcastle during November 2019.
- **Recipient of grant by The Ericsson Research Foundation** Stockholm, Sweden
Ericsson 2019
 – Grant of 10000 SEK to attend the 2019 Summer School of High Dimensional Probability and Algorithms, held in Paris, France, July 1-5th.
- **Recipient of the ‘Marcos Orrego Puelma’ Award** Santiago, Chile
Institute of Engineers of Chile 2017
 – Award given to the best Engineering student of UTFSM graduated in 2016 (among ~1000 students).
- **Recipient of the ‘Mejor Titulado Ing. Civil Electrónica Promoción 2016’ award** Valparaíso, Chile
School of Engineers of Chile 2017
 – Distinction given to the best Electronic Engineer of UTFSM graduated in 2016, in recognition of his academic performance and his conditions of leadership and participation.
- **Recipient of the Academic Distinction ‘Federico Santa María’** Valparaíso, Chile
UTFSM 2016
 – Award given to the best student of Electronics Engineering graduated in 2016.
- **Outstanding student of Master studies in Electronic Engineering** Valparaíso, Chile
UTFSM 2016
 – Award given to the best student of Master of Science of Electronic Engineering graduated in 2016.
- **Recipient of the CONICYT ‘Scholarship for Master studies in Chile’** Santiago, Chile
CONICYT 2015-2016
 – National scholarship given to approximately 250 students in Chile per year to economically support their MSc. studies in a Chilean university.
 – Achieved the third highest score in the scholarship selection process (out of more than 2500 applicants).
- **Recipient of the CONICYT ‘Scholarship for short internships abroad’** Santiago, Chile
CONICYT 2015
 – National scholarship given to approximately 60 students in Chile per year to afford a short internship in a university abroad.
- **1st place in the Honor list** Valparaíso, Chile
UTFSM 2014 and 2015
 – Honor given to the student with the best academical performance of all the University (among ~10000 students).

- **2nd place in the Honor list** Valparaíso, Chile
 UTFSM 2013 and 2016
 - Honor given to the student with the second best academical performance of all the University (among ~10000 students).
- **Recipient of the Academic Merit of the Electronics Department Award** Valparaíso, Chile
 Department of Electronics, UTFSM 2012-2017
 - Award given to all the students of the Electronics Department with average academic qualifications of over 80 out of 100 (95th percentile approximately).
 - Award won six consecutive times (all the times possible).
- **Recipient of the ‘Premio al Mérito Académico UTFSM’** Valparaíso, Chile
 UTFSM 2012-2016
 - Award given to the two students with highest academic qualifications of all their generation in the University (around 1000 students per generation).
 - Award won five consecutive times (all the times possible).
- **‘Puntaje Nacional’ Scholarship** Valparaíso, Chile
 UTFSM 2011-2016
 - Full undergraduate and postgraduate scholarship given to the student with perfect score in any PSU test (National University Selection Test) of 2010.
- **Highest PSU score of the UTFSM in 2011** Valparaíso, Chile
 UTFSM 2011
 - Honor given to the student with highest average PSU (National University Selection Test) score who entered the UTFSM in 2011.
- **Perfect PSU score in Mathematics** Valparaíso, Chile
 Ministry of Education of Chile 2010
 - Honor given to the student with perfect score in the PSU (National University Selection Test) of Mathematics of 2010.
 - Only 450 students achieved this score in 2010 (out of more than 250000).

Skills

- **Computer Skills:** MATLAB (advanced), L^AT_EX(advanced), Python (Intermediate), HTML (Basic).
- **Languages:** Spanish (native), English (fluent).
- Hold a Chilean driver’s license (B).

Publications

Journal papers

- [J16] **Rodrigo A. González**, Koen Classens, Cristian R. Rojas, James S. Welsh and Tom Oomen. “Identification of Additive Continuous-time Systems in Open and Closed-loop”. *Automatica*, 2024.
- [J15] **Rodrigo A. González**, Koen Classens, Cristian R. Rojas, James S. Welsh and Tom Oomen. “Statistical Analysis of Block Coordinate Descent Algorithms for Linear Continuous-time System Identification”. *IEEE Control Systems Letters*, 8(1): 388-393, 2024.

- [J14] **Rodrigo A. González**, Siqi Pan, Cristian R. Rojas and James S. Welsh. “Consistency analysis of refined instrumental variable methods for continuous-time system identification in closed-loop”. *Automatica*, Article 111697, 2024.
- [J13] Angel L. Cedeño, **Rodrigo A. González**, Rodrigo Carvajal and Juan C. Agüero. “Identification of Wiener state-space models utilizing Gaussian sum smoothing”. *Automatica*, Article 111707, 2024.
- [J12] **Rodrigo A. González**, Koen Tiels and Tom Oomen. “Kernel-based identification using Lebesgue-sampled data”. *Automatica*, Article 111648, 2024.
- [J11] **Rodrigo A. González**, Cristian R. Rojas, Siqi Pan and James S. Welsh. “On the relation between discrete and continuous-time refined instrumental variable methods”. In *IEEE Control Systems Letters*, 7(1): 2233-2238, 2023.
- [J10] Angel L. Cedeño, **Rodrigo A. González**, Boris I. Godoy, Rodrigo Carvajal and Juan C. Agüero. “On filtering and smoothing algorithms for linear state-space models having quantized output data”. In *Mathematics*, 11(6): 1327, 2023.
- [J9] Siqi Pan, James S. Welsh, **Rodrigo A. González** and Cristian R. Rojas. “Consistency Analysis and Bias Elimination of the Instrumental Variable Based State Variable Filter Method”. *Automatica*, Article 110511, 2022.
- [J8] **Rodrigo A. González**, Cristian R. Rojas, Siqi Pan and James S. Welsh. “Refined instrumental variable methods for unstable continuous-time systems in closed-loop”. *International Journal of Control*, 2022.
- [J7] **Rodrigo A. González**, Cristian R. Rojas, Siqi Pan and James S. Welsh. “Theoretical and practical aspects of the convergence of the SRIVC estimator for over-parameterized models”. *Automatica*, Article 110355, 2022.
- [J6] **Rodrigo A. González**, Cristian R. Rojas, Siqi Pan and James S. Welsh. “Consistent identification of continuous-time systems under multisine input signal excitation”. *Automatica*, Article 109859, 2021.
- [J5] Siqi Pan, James S. Welsh, **Rodrigo A. González** and Cristian R. Rojas. “Efficiency Analysis of the Simplified Refined Instrumental Variable Method for Continuous-time Systems”. *Automatica*, Article 109196, 2020.
- [J4] Siqi Pan, **Rodrigo A. González**, James S. Welsh and Cristian R. Rojas. “Consistency Analysis of the Simplified Refined Instrumental Variable Method for Continuous-time Systems”. *Automatica*, Article 108767, 2020.
- [J3] Francisco J. Vargas and **Rodrigo A. González**. “On the existence of a stabilizing solution of Modified Algebraic Riccati Equations in terms of standard Algebraic Riccati Equations and Linear Matrix Inequalities”. In *IEEE Control Systems Letters*, 4(1): 91-96, 2019.
- [J2] **Rodrigo A. González**, Francisco J. Vargas and Jie Chen. “Necessary and sufficient conditions for mean square stabilization over MIMO SNR-Constrained channels with colored and spatially correlated additive noises”. In *IEEE Transactions on Automatic Control*, 64(11): 4825-4832. 2019.
- [J1] **Rodrigo A. González**, Patricio E. Valenzuela, Cristian R. Rojas and Ricardo A. Rojas. “Optimal enforcement of causality in non-parametric transfer function estimation”. In *IEEE Control Systems Letters*, 1(2): 268-273, 2017.

Conference papers

- [C16] **Rodrigo A. González** and Paulina Quintanilla. “Grey-box Recursive Parameter Identification of a Nonlinear Dynamic Model for Mineral Flotation”, 10th International Conference on Control, Decision and Information Technologies (CoDIT), Valletta, Malta, July 2024.

- [C15] Angel L. Cedeño, **Rodrigo A. González** and Juan C. Agüero. “Gaussian sum filtering for Wiener state-space models with a class of non-monotonic piecewise nonlinearities”, 20th IFAC Symposium on System Identification (SYSID’24), 2024.
- [C14] Augustus Elton, **Rodrigo A. González**, James S. Welsh, Cristian R. Rojas and Minyue Fu. “Parametric Continuous-Time Blind System Identification”. 62nd IEEE Conference on Decision and Control (CDC’23), 2023.
- [C13] Max van Meer, **Rodrigo A. González**, Gert Witvoet and Tom Oomen. “Identification of Nonlinear Dynamics in Switched Reluctance Motors through Linear Bayesian Estimation”. 62nd IEEE Conference on Decision and Control (CDC’23), 2023.
- [C12] Augustus Elton, **Rodrigo A. González**, James S. Welsh, Tom Oomen and Cristian R. Rojas. “Blind non-parametric estimation of SISO continuous-time systems”. In *Proceedings of the IFAC World Congress 2023 (IFAC WC 2023)*, 2023.
- [C11] **Rodrigo A. González**, Cristian R. Rojas, Siqi Pan and James S. Welsh. “Parsimonious identification of continuous-time Systems: A block-coordinate descent approach”. In *Proceedings of the IFAC World Congress 2023 (IFAC WC 2023)*, 2023.
- [C10] **Rodrigo A. González**, Koen Tiels and Tom Oomen. “Identifying Lebesgue-sampled continuous-time impulse response models: A kernel-based approach”. In *Proceedings of the IFAC World Congress 2023 (IFAC WC 2023)*, 2023.
- [C9] **Rodrigo A. González**, Angel L. Cedeño, María Coronel, Juan C. Agüero and Cristian R. Rojas. “An EM algorithm for Lebesgue-sampled state-space continuous-time system identification”. In *Proceedings of the IFAC World Congress 2023 (IFAC WC 2023)*, 2023.
- [C8] **Rodrigo A. González**, Cristian R. Rojas, Siqi Pan and James S. Welsh. “The SRIVC algorithm for continuous-time system identification with arbitrary input excitation in open and closed loop”. In *Proceedings of the 60th IEEE Conference on Decision and Control (CDC’21)*, pages 3004-3009, 2021.
- [C7] **Rodrigo A. González**, Cristian R. Rojas and Håkan Hjalmarsson. “Non-causal regularized least-squares for continuous-time system identification with band-limited input excitations”. In *Proceedings of the 60th IEEE Conference on Decision and Control (CDC’21)*, pages 114-119, 2021.
- [C6] **Rodrigo A. González** and Cristian R. Rojas. “A finite-sample deviation bound for stable autoregressive processes”. In *Proceedings of the 2nd Conference on Learning for Dynamics and Control (LADC)*, Berkeley, USA, pages 191-200, 2020.
- [C5] **Rodrigo A. González**, James S. Welsh and Cristian R. Rojas. “Enforcing stability through ellipsoidal inner approximations in the indirect approach for continuous-time system identification”. In *Proceedings of the 21st IFAC World Congress (IFAC’2020)*, Berlin, Germany, pages 566-571, 2020.
- [C4] **Rodrigo A. González** and Cristian R. Rojas. “Finite sample deviation and variance bounds for first order autoregressive processes”. In *Proceedings of the 45th International Conference on Acoustics, Speech, and Signal Processing (ICASSP’20)*, Barcelona, Spain, pages 5380-5384, 2020.
- [C3] **Rodrigo A. González**, James S. Welsh and Cristian R. Rojas. “An asymptotically optimal indirect approach to continuous-time system identification”. In *Proceedings of the 57th IEEE Conference on Decision and Control (CDC’18)*, Miami Beach, FL, USA, pages 638-643, 2018.
- [C2] **Rodrigo A. González** and Cristian R. Rojas. “A fully Bayesian approach to kernel-based regularization for impulse response estimation”. In *Proceedings of the 18th IFAC Symposium on System Identification (SYSID’18)*, Stockholm, Sweden, pages 186-191, 2018.

- [C1] **Rodrigo A. González**, Francisco J. Vargas and Jie Chen. “Stabilization of MIMO systems over additive correlated noise channels subject to multiple SNR-constraints”. In *Proceedings of the 16th European Control Conference (ECC’18)*, Limassol, Cyprus, pages 1493-1498, 2018.

Submitted Journal papers

- [SJ3] **Rodrigo A. González**, Max van Haren, Tom Oomen and Cristian R. Rojas. “Sampling in Parametric and Nonparametric System Identification: Aliasing, Input Conditions, and Consistency” (submitted for publication), 2024.
- [SJ2] Koen Classens, **Rodrigo A. González** and Tom Oomen. “Recursive Identification of Additive Systems: An Instrumental-Variable Approach with Application to Modal Mechanical Systems” (submitted for publication), 2024.
- [SJ1] Angel L. Cedeño, **Rodrigo A. González** and Juan C. Agüero. “The Quadrature Gaussian Sum Filter and Smoother for Wiener Systems” (submitted for publication), 2024.

Submitted Conference papers

- [SC1] **Rodrigo A. González**, Angel L. Cedeño, Koen Tiels and Tom Oomen. “Truncated Gaussian Noise Estimation in Nonlinear State-Space Models”, (submitted for publication), 2024.

Theses

- [T3] **Rodrigo A. González**, *Continuous-time System Identification: Refined Instrumental Variables and Sampling Assumptions*. Ph.D. Thesis, KTH Royal Institute of Technology, May 2022. Supervisor: Prof. Cristian R. Rojas.
- [T2] **Rodrigo A. González**, *Consistency and Efficiency in Continuous-time System Identification*. Licentiate of Engineering Thesis, KTH Royal Institute of Technology, June 2020. Supervisor: Prof. Cristian R. Rojas.
- [T1] **Rodrigo A. González**, *Enforcement of Causality and Passivity in Spectral Analysis* (in Spanish). Master’s Thesis, Universidad Técnica Federico Santa María, Valparaíso, Chile, November 2016. Supervisors: Prof. Ricardo A. Rojas, Prof. Cristian R. Rojas and Patricio E. Valenzuela.

Books

- [B1] **Rodrigo A. González**, *Exercise Compendium of Linear Systems Analysis* (in Spanish). July 2019.

Others

- [P15] Maarten van der Hulst, Koen Classens, **Rodrigo A. González**, Nick Dirx, Jeroen van de Wijdeven and Tom Oomen. “Modal identification for multivariable motion systems”. Presentation the Third Euspen Special Interest Group Meeting on Precision Motion Systems & Control, ‘s-Hertogenbosch, The Netherlands, 2024.
- [P14] **Rodrigo A. González**, Koen Classens, Maarten van der Hulst and Tom Oomen. “Statistically-Optimal Modal MIMO Identification for High-Tech Motion Systems”. Presentation at the 2024 Workshop of the European Research Network on System Identification (ERNSI), September 2024, Venice, Italy.
- [P13] **Rodrigo A. González**, Koen Classens, Cristian R. Rojas, James S. Welsh and Tom Oomen. “Additive Continuous-time Identification: With Application to Modal Mechanical Systems”. Presentation at the 43rd Benelux Meeting on Systems and Control, March 2024, Blankenberge, Belgium.
- [P12] **Rodrigo A. González**, Koen Classens, Cristian R. Rojas, James S. Welsh and Tom Oomen. “Additive Continuous-time Identification: With Application to Modal Mechanical Systems” (in Spanish). Presentation at the second Symposium on Identification, Control and Applications at UTFSM, January 2024, Valparaíso, Chile.

- [P11] Koen Tiels, **Rodrigo A. González** and Tom Oomen. “Control variates for multivariate truncated probability density functions with application in system identification”. Poster at the 2023 Workshop of the European Research Network on System Identification (ERNSI), September 2023, Stockholm, Sweden.
- [P10] **Rodrigo A. González**, Angel L. Cedeño, Koen Tiels and Tom Oomen. “Identification of linear state-space models subject to truncated Gaussian disturbances”. Poster at the 2023 Workshop of the European Research Network on System Identification (ERNSI), September 2023, Stockholm, Sweden.
- [P9] Tom Oomen, Leontine Aarnoudse, Lennart Blanken, Koen Classens, Mathyn van Dael, Nic Dirx, **Rodrigo A. González**, Max van Haren, Johan Kon, Max van Meer, Maurice Poot, Paul Tacx, Koen Tiels and Gert Witvoet. “Learning in Machines: From Data to Models, Control Performance, and Monitoring”. First JSPS-NWO Seminar Research Network on Learning in Machines: New Perspectives for Future Nanoscale Production, July 3-7, 2023 Tokyo, Japan.
- [P8] **Rodrigo A. González**, Koen Tiels and Tom Oomen. “Non-parametric continuous-time system identification with Lebesgue-sampled output measurements”. Presentation at the 42nd Benelux Meeting on Systems and Control, March 2023, Elspeet, The Netherlands.
- [P7] **Rodrigo A. González**, Koen Tiels and Tom Oomen. “Non-parametric Identification of Lebesgue-sampled Continuous-time Systems” (in Spanish). Presentation at the first Symposium on Identification, Control and Applications at UTFSM, January 2023, Valparaíso, Chile.
- [P6] **Rodrigo A. González**, Angel L. Cedeño, María Coronel, Juan C. Agüero and Cristian R. Rojas. “Identification of Continuous-Time Systems Utilizing Lebesgue-Sampled Data”. Poster at the 2022 Workshop of the European Research Network on System Identification (ERNSI), September 2022, Leuven, Belgium.
- [P5] **Rodrigo A. González**, Cristian R. Rojas and Håkan Hjalmarsson. “Non-causal regularized least-squares for continuous-time system identification with band-limited input excitations”. Poster at the 2021 Workshop of the European Research Network on System Identification (ERNSI), September 2021, online.
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