Curriculum Vitae

Wim Michiels, PhD
Numerical Analysis and Applied Mathematics (NUMA) section
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Professional preparation

KU Leuven	Electrical Engineering	B.Sc., M.Sc., 1997
KU Leuven	Computer Science	PhD, 2002, sup. Dirk Roose (KU Leuven) and Rodolphe Sepulchre (Université de Liège, now KU Leuven)

Positions

- October 1, 2008 - present: Professor, grade Full Professor ("Gewoon Hoogleraar") since 2021
- October 1, 2002 - September 30, 2008: Postdoctoral Fellow, Research Foundation – Flanders (FWO)
- January 1, 2007 - August 1, 2007: Postdoctoral Researcher, Eindhoven University of Technology
- September 1, 1997 – September 30, 2002: PhD student

Research interests and expertise

- Dynamical systems and control: control theory, numerical methods, applications
  The emphasis is on control of large-scale and infinite-dimensional systems
  - Systems modelled by delay-differential equations
  - Systems modelled by partial differential equations
  - Networks of interconnected dynamical systems
- Scientific computing, numerical linear algebra, numerical approximation
- Optimization: theory, algorithms, and its applications in systems and control

Publications

Monographs: 2 Edited volumes: 4 Journal papers: 152 Chapters in book: 19
Conference papers: 106

Citations: 5483, h-index 36 (ISI Web of Science), 10490, h-index 46 (Google Scholar)

An updated publication, with links for download, list is available from here.

Software

Algorithmically oriented papers are accompanied by open-source software tools. The analysis and control design tools for linear time-delay system have been integrated in the software package TDS-CONTROL.

Selection of invited talks and keynotes

- Tri-Event Plenary Lecture *Joint IFAC Conference: SSC - TDS - COSY* (2025)
- Plenary lecture ICINCO 2023 - *20th International Conference on Informatics in Control, Automation and Robotics*
- Wilhelm and Else Heraeus Seminar (Bad Honnef, 2018)
- Lothar-Collatz-Kolloquium für Angewandte Mathematik (TU Hamburg, 2019)
- Keynote Delay Days. Hasselt - Utrecht – Berlin (2020), keynote 3rd DECOD – Dalays and Constraints in Distributed Parameter Systems workshop (2021)

Main scientific meetings (from 2016)

- *European Control Conference 2027* ECC 2027), to be held 13-16 July 2027, Brussels, Belgium.
  Co-Chair, International Program Committee, member local Organizing Committee
- *16 IFAC Workshop on Time-Delay Systems*, 29 September- 1 October 2021, Guangzhou, China.
  Co-Chair, International Program Committee
- 36th, 38th and 41st *Benelux Meeting on Systems and Control* (location rotating)
  Member of the Organizing Committee
- *2nd UCoCoS Workshop*, 18 March 2019, Leuven, Belgium. Main organizer
- *13h IFAC Workshop on Time-Delay Systems*, 22-24 June, 2016, Istanbul, Turkey.
  Co-Chair, International Program Committee
- *6th IFAC Workshop on Periodic Control Systems*, 29 June 29 – 3 July 2016, Eindhoven, Netherlands.
  Chair, International Program Committee
- *Conference of the International Linear Algebra Society* (ILAS), 11-15 July, 2016, Leuven, Belgium.
  Member of the local Organizing Committee and Scientific Committee
- *4th European Conference on Computational Optimization (EUCCO 2016)*, 12-14 September 2016, Leuven, Belgium
  Member of the Organizing Committee
- Associate Editor for 1-3 conferences per year (IEEE, IFAC), member EUCA Editorial Board, Associate-Editor-at-Large: IEEE-CDC (2022), ECC (2023-)

Scientific projects (from 2016)

- Coordinator of the MSCA European Joint Doctorates Network *Understanding and Controlling Complex Systems* (UCoCoS) (2016-2020)
- Promotor of three research projects funded by the Research Foundation Flanders (FWO), two projects funded by the KU Leuven Research Council, co-promotor of the *KU Leuven Optimization in Engineering Centre - OPTEC*
- Promotor of a joint project KU Leuven - Czech University of Prague (CELSA Alliance)
- Promotor of a joint project KU Leuven – Université de Lille (Global PhD Partnership program)
- KU Leuven PI and Steering Committee member of two CNRS-GDRI networks (GDRI = Groupe de Recherche International), promotor of exchange project FWO – Czech Academy of Sciences, member management committee of Cost Action GA 18232
- Promotor of two postdoctoral fellowships (FWO Fellowship and Pegasus Fellowship - MSCA CoFUND) and two PhD fellowships (KU Leuven Research Council)

Collaborations and supervision (from 2016)

Collaboration with other groups of KU Leuven (valorized in joint publications): section Robots, Automation and Mechatronics (RAM), section Brain and Cognition

External collaborations (valorized in joint publications):

Czech Academy of Sciences (CZ), Eindhoven University of Technology (NL), CINVESTAV-IPN (MX), Centrale Lille / Inria (FR), CentraleSupélec (FR), Budapest University of Technology and Economics (HR), KTH - Royal Institute of Technology, Université Catholique de Louvain (B), Harbin University of Technology (CN), Czech Technical University in Prague (CZ), Université de Genève (CH), Koç University (TR), Université de Lorraine (FR), Universiteit Groningen (NL), The University of Rostock (D), Anadolu University (TR), Tel Aviv University (IL), TNO (NL), Unicamp (BR), Universidad de Juanjuato (MX), City University of Hong Kong (CN), Università degli Studi dell'Aquila (IT)

PhD researchers (italic refers to joint PhDs with external institutions):

Dan Pilbauer (2017), Luca Fenzi (2020), Francesco Borgioli (2020), *Haik Jan Silm* (2020), *Deesh Dileep* (2020), *Libo Su* (2021), *Kirill Rogov* (2021), Koen Ruymbeek (2021), Pieter Appeltans (2023), *Adrian Saldanha*, Evert Provoost, Sanaz Akbarisisi, *Pournami Padmalatha*, Jasper Visterin

P. Appeltans is recipient of an IFAC Young Author Prize.

Postdocs and incoming sabbaticals

- Roel Van Beeumen, former PhD student and postdoc 01/05/2015 - 30/07/2016, currently Professor, KU Leuven, and Staff Scientist, Lawrence Berkeley National Laboratory
- Alexey Egorov, sabbatical leave 1/09/2016 – 31/08/2017, currently Professor, Saint-Petersburg State University
- Marco A. Gomez, postdoc 1/06/2018 – 31-05-2019, currently staff scientist at CINVESTAV
- Yanling Wei, postdoc 1/02/2018 - 31/01/2019, currently Full Professor, Southeast University, Nanjing
- Haik Silm, postdoc 01/11/2020 – 31/08/2022, currently research expert of Siemens Industry Software
- Diego Torres Garcia, postdoc (01/06/2025-)

Commissions of trust (from 2016)

- Member of the General Assembly of the *European Control Association* (EUCA) and representative of Belgium
- Senior Editor: Systems & Control Letters (2026-)
- Associate Editor: IEEE Transactions on Automatic Control (2014-2020), Systems & Control Letters (2010-2014 and 2023-2025), Communications in Nonlinear Science and Numerical Simulation (2015-2017), Calcolo (2019-), Frontiers in Control Engineering (2020-), Kybernetika (2021-), Lecture Notes in Delays and Dynamics, Springer (2013-)
- Member of the IFAC Technical Committee on Linear Control Systems (2006-)
- Chair of the IFAC Working Group on Time-Delay Systems (2017-), co-founder and host of the quarterly *Time Delay Systems Webinar*
- Member of steering group, Graduate School on Systems, Optimization, Control and Networks (SOCN) (2011-)
- Member of the scientific commission SEN-3 of the funding agency FNRS (2013-2019), member of the KU Leuven Research Council (2018-2022) and the FWO Review College (2022-)
- Member of the reading committee, >10 PhD theses, and 3 Habilitation thesis outside KU Leuven

Teaching and didactic activities (from 2017)

- Training courses in international PhD training programs organized by the doctoral schools EECI-HYCON (2016, 2017, 2022, 2025), by the Dutch Institute of Systems and Control, DISC (2021), by the International Centre for Mechanical Science, CISM (2019), and by the Gran Sasso Science Institute (2025); PhD training course in the framework MSCA project HYDRA (2017), mini-course at Centrale Supélec (2017)
- 6 yearly courses at KU Leuven, in the programs of Bachelor in Engineering Science (*Analysis III*, *Numerical Approximation with Application in Data Science*), Bachelor in Engineering Science – Architecture (*Engineering Mathematics*), Master in Engineering: Computer Science (*Mathematical modelling and Simulation*), Master in Engineering: Mathematical Engineering (*Computational optimization, Complex Analysis and its Applications*)

  "Golden Chalk"- teaching award by VTK, the student organization of the Faculty of Engineering of KU Leuven: 2013, 2014, 2016, 2017, 2018, 2023, 2024, 2025
- Member Program Committee, Bachelor and Master in Electrical Engineering (2014-)

Science Communication

- Participation to regional outreach activities, promotion of STEM professions and study programs
- Jury member yearly BEST competition, KU Leuven chapter (BEST= Board of European Students of Technology)
- Development of website explaining time-delay systems to a non-specialist audience.

Scientific achievements

My research group addresses modeling, model order reduction, analysis and control methodologies for dynamical systems, as well as related linear algebra problems. The systems considered are described by delay-differential equations of retarded and neutral type, by delay differential algebraic equations (DDAEs) [14] and by classes of hyperbolic PDEs [1]. Also, (partial) synchronization phenomena in networks of interconnected systems [12] and the design of decentralized controllers [7] are studied.

I will first outline two main research directions in which my group's contributions led to an established position. Next, I will comment on my specific research profile, co-investments in research and education, and community building.

Selection of main contributions

- The first main, methodological contribution lies in the development of a novel spectrum-based framework for the analysis and design of feedback controllers for linear time-delay systems of retarded and neutral type, including computational methods for (robust) stability analysis, the design of stabilizing feedback controllers and controllers optimizing robustness and performance criteria expressed in terms of H2 and H-infinity norms. See, e.g., [3,8,13-17]. The adopted flexible modeling framework in terms of DDAEs, which is particularly amenable for interconnected systems, and the direct optimization approach, enable the design of structured controllers (static or dynamic controllers with prescribed order, delay-based controllers, prediction-based controllers, PID controllers, …). Extensions to the design of periodic feedback controllers have also been made. The techniques developed have been validated on a variety of applications, with a prominent place given to vibration control [5] and machining [10].

  These computationally oriented contributions are supported by and balanced with new developments in control theory, such as the characterization of stabilizability [4] and other structural properties, algebraic design approaches, eigenvalue perturbation theory, Floquet theory, works where the leap is made from asymptotic to finite-time stabilization (using non-Lipschitz control law based on homogeneity properties [9] and periodic delayed feedback [6], respectively) and implementation aspects of controllers.

- The second main contribution lies in the developments of methods for analyzing and solving generic nonlinear eigenvalue problems [11] (beyond special classes inferred from delay-differential equations), as well as related eigenvalue optimization problems. This work is grounded in approximation theory, algebraic geometry and numerical linear algebra, and it focuses on structure-exploiting methods for large-scale problems. In the last decade, the leap has been made towards eigenvalue problems nonlinear in the eigenvector [2], which appear in emerging applications in quantum chemistry, computational electronics and machine learning.

References:

[1] Michiels, W., Bribiesca Argomedo, F., Auriol, J. (2025). On hyperbolic PDEs, filtered feedback control laws, and fractal-like stability crossing curves. *IEEE Transactions on Automatic Control*. In Review.

[2] Janssens, V., Meerbergen, K. and Michiels, W. (2025). Linearizing a nonlinear eigenvalue problem with quadratic rational eigenvector nonlinearities arXiv:2510.02900. S*IAM Journal on Matrix Analysis and Applications*. In Review.

[3] Michiels, W. (2026). Theory of Control of Linear Time-Delay Systems. In: Encyclopedia of Systems and Control, 1, 126-139, *Reference Module in Materials Science and Materials Engineering*. Elsevier

[4] Michiels, W., Niculescu, S-I., Boussaada, I., Mazanti, G. (2025). On the relations between stability optimization of linear time-delay systems and multiple rightmost characteristic roots. *Mathematics of Control Signals and Systems*, *37*, 143-166.

[5] Silm, H., Kure, M., Busek, J., Michiels, W., Vyhlidal, T. with Michiels, W. (2024). Spectral design and experimental validation of noncollocated vibration suppression by a delayed resonator and time-delay controller. *IEEE Transactions on Control Systems Technology*, *32* (1), 73-85.

[6] Zhou, B., Michiels, W., Chen, J. (2022). Fixed-time stabilization of linear delay systems by smooth periodic delayed feedback. *IEEE Transactions on Automatic Control*, *67* (2), 557-573.

[7] Dileep, D., Fiter, C., Hetel, L., Michiels, W. (2022). A scalable method for the analysis of networked linear systems with decentralized sampled-data control. *International Journal of Robust and Nonlinear Control*, 32 (6), 3292-3313.

[8] Gomez, M.A., Egorov, A.V., Mondie, S., Michiels, W. with Gomez, M.A. (corresp. author) (2019). Optimization of the H2 norm for single-delay systems, with application to control design and model approximation. *IEEE Transactions on Automatic Control*, 64 (2), 804-811.

[9] Silm, H., Ushirobira, R., Efimov, D., Richard, J-P., Michiels, W. with Silm, H. (2019). A Note on Distributed Finite-Time Observers. *IEEE Transactions on Automatic Control 64* (2), 759-766.

[10] Hajdu, D., Borgioli, F., Michiels, W., Insperger, T., Stepan, G. (2019). Robust stability of milling operations based on pseudospectral approach. *International Journal of Machine Tools & Manufacture*, *146*, Art.No. 103516.

[11] Van Beeumen, R., Meerbergen, K., Michiels, W. (2015). Compact rational Krylov methods for nonlinear eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, *36* (2), 820-838.

[12] Steur, E., Michiels, W., Huijberts, H., Nijmeijer, H. (2014). Networks of diffusively time-delay coupled systems: Conditions for synchronization and its relation to the network topology. *Physica D*, 277(1), 22-39.

[13] Michiels, W., Niculescu, S-I. (2014). *Stability, control, and computation for time-delay systems. An eigenvalue based approach*, 2nd edition (Advances in Design and Control, 27). Philadelphia: SIAM.

[14] Michiels, W. (2011). Spectrum based stability analysis and stabilization of systems described by delay differential algebraic equations. *IET Control Theory and Applications*, 5 (16), 1829-1842.

[15] Jarlebring, E., Vanbiervliet, J., Michiels, W. (2011). Characterizing and computing the H2 norm of time-delay systems by solving the delay Lyapunov equation. IEEE Transactions on Automatic Control, 56 (4), 814-825.

[16] Gumussoy, S., Michiels, W. (2011). Fixed-order H-infinity control for interconnected systems using delay differential algebraic equations. *SIAM Journal on Control and Optimization*, *49* (5), 2212-2238.

[17] Michiels, W., Engelborghs, K., Vansevenant, P., Roose, D. (2002). *Continuous pole placement method for delay equations*. Automatica, 38 (5), 747-761.

Comment on research profile

- My research is integrative in nature, in the sense that many works combine Systems and Control theory with Computational Mathematics. I believe a strong, distinctive feature of my research group is its position and embedding in *both research fields*. This is for example reflected the publication overview in Annex 1, with a close to equal split in the journal publications.
- Next to supervising, mentoring and management of my research group, I am still doing a lot of research myself, including development of new theory and algorithms, doing computational experiments and writing articles, and I can rely on a large international network of collaborators of mixed seniority, which is apparent from a significant number of first-author publications (for the stage-of-career) and publications with external co-authors only. The strong international embedding of my research and "*virtual extension"* of my research team allow me to accelerate the developments and use the acquired research funding in an efficient way, while strong collaborations with application-oriented groups ensure applicability and inspiration of relevant research questions.

Co-investments in research and education

- Lead author of the monograph "*Stability, Control and Computation of Time-Delay Systems*", SIAM, 2014, 2nd edition (1664 citations) that has been widely used in courses on time-delay systems and by colleagues to familiarize new students to the topic.
- Author of two contributions to the *Encyclopedia of Systems and Control*
- The manual of the software package TDS-CONTROL is also intended as a course on time-delay systems, since properties and results of such systems are gradually revealed by means of numerical experiments on a set of benchmarks of increasing complexity.
- Lecturer of doctoral courses on various research topics (model order reduction, synchronization in coupled network, analysis and control of time-delay systems) for established international doctoral schools (EECI, DISC, SOCN, CISM, Gran Sasso Science Institute), in addition to contributions to preconference courses and summer schools

Community building

- Chair, IFAC Time-Delay Systems Working Group, leading role in organizing scientific meetings
- Strong investment throughout career in network of research collaborations (see the dedicated section). In several of them, the leap has been made towards jointly supervising each other's doctoral students, for which dedicated funding has been obtained (European Joint Doctorates network - Marie Skłodowska-Curie Actions, Global PhD Partnership program, CELSA alliance)
- Support of young researchers with high potential for academia (career advice, prioritized collaborations, support letters,...)

Annex 1: Overview of journal publications

Systems and Control	*ISI Impact Factor (2024)*	
IEEE Transactions on Automatic Control	7.0	19
Automatica	5.9	14
Systems & Control Letters	2.5	9
International Journal of Control	1.5	6
International Journal of Robust and Nonlinear Control	3.2	7
International Journal on Systems Science	4.6	1
Control Engineering Practice	4.6	1
IEEE Control Systems Magazine	7.3	1
IET Control Theory and Applications	2.3	2
International Journal of Dynamics and Control	1.9	1
IEEE Transaction on Control Systems Technology	3.9	2
European Journal of Control	2.6	3
Journal of the Franklin Institute	3.7	2
IEEE Control Systems Letters	2.0	1
IEEE Transactions on Cybernetics	10.5	1
IEEE Transactions on Systems Man Cybernetics - Systems	8.7	3
SIAM Journal on Control and Optimization	2.4	9
Mathematics of Control, Signals and Systems	1.8	3
IMA Journal on Mathematical Control and Information	1.0	4
Computational and Applied Mathematics, Scientific Computing		
Journal of Computational and Applied Mathematics	2.6	4
Linear Algebra and its Applications	1.1	2
SIAM Journal on Matrix Analysis and Applications	1.7	11
SIAM Journal on Scientific Computing	2.6	5
SIAM Journal of Numerical Analysis	2.9	1
BIT Numerical Mathematics	1.7	1
Numerical Algorithms	2.0	1
Numerische Mathematik	2.2	1
IMA Journal of Numerical Analysis	2.4	2
Numerical Linear Algebra with Applications	2.1	3
SIAM Journal of Optimization	2.3	1
ESAIM Control, Optimisation, and Calculus of Variations	1.2	1
Dynamical Systems		
Chaos	3.2	3
SIAM Journal of Applied Dynamical Systems	1.8	2
International Journal of Bifurcation and Chaos	2.3	3
Physical Review A	2.4	1
Nonlinearity	1.6	1
Physica D	1.6	1
Application-oriented journals		
International Journal of Machine Tools & Manufacture	18.8	1
Mechanics Based Design of Structures and Machines	2.9	1
International Journal for Numerical Methods in Engineering	2.5	1
Mechanical Systems and Signal Processing	8.9	2
Journal of Sound and Vibration	4.9	4
Journal of Vibration and Control	2.4	1
Journal of Process Control	3.4	1
AIAA Journal	2.8	1
IEEE Transactions on Power Delivery	3.7	1
International Journal of Tomography and Statistics		2
Journal of Computational Electronics	2.5	1

Annex 2: Bibliography

Journal articles

1. Ding, Y., Zhou, B., Michiels, W. (2025). Prescribed-time stabilization of p-normal nonlinear systems by periodic delayed feedback. *Systems & Control Letters*, *205*, Art.No. 106261. doi: 10.1016/j.sysconle.2025.106261
2. Gomez, M.A., Egorov, A., Michiels, W. (2025). A constructive approach to stabilizability and detectability of linear time-delay systems via complete-type functionals. *IEEE Transactions on Automatic Control*. doi: 10.1109/TAC.2025.3627900 Open Access
3. Akbarisisi, S., Michiels, W. (2025). Spectrum-based Stability Analysis and Stabilization of Systems with Time-periodic Delay Differential Algebraic Equations. *European Journal of Control*, Art.No. 101400. doi: 10.1016/j.ejcon.2025.101400
4. Peichl, A., Kure, M., Michiels, W., Vyhlidal, T. (2025). Integrated design of system structure and delayed resonator towards efficient non-collocated vibration absorption. *Journal of Sound and Vibration*, *612*, Art.No. 119101. doi: 10.1016/j.jsv.2025.119101 Open Access
5. Michiels, W., Niculescu, S-I., Boussaada, I., Mazanti, G. (2025). On the relations between stability optimization of linear time-delay systems and multiple rightmost characteristic roots. *Mathematics of Control Signals and Systems*, *37*, 143-166. doi: 10.1007/s00498-024-00398-1 Open Access
6. Boussaada, I., Mazanti, G., Niculescu, S-I., Michiels, W. (2025). Decay rate assignment through multiple spectral values in delay systems. *IEEE Transactions on Automatic Control*, *70* (2), 830-844. doi: 10.1109/TAC.2024.3447117 Open Access
7. Provoost, E., Michiels, W. (2024). The Lanczos Tau Framework for Time-Delay Systems: Padé Approximation and Collocation Revisited. *SIAM Journal on Numerical Analysis*, *62* (6), 2529-2548. doi: 10.1137/24M164611X Open Access
8. Zhao, L., Li, Z-Y., Zhou, B., Michiels, W. (2024). On the weak infinite zero structures and relative degrees for linear time-delay systems. *SIAM Journal on Matrix Analysis and Applications*, *45* (4), 1873-1901. doi: 10.1137/23M1606071 Open Access
9. Li, H., Zhou, B., Michiels, W. with Michiels, W. (corresp. author) (2024). Prescribed-time sensor fault estimation for linear systems with unknown inputs by periodic delayed observers. *International Journal of Robust and Nonlinear Control 34* (10), 6636-6658. doi: 10.1002/rnc.7250 Open Access
10. Zhou, B., Peng, Z., Michiels, W. (2024). Memoryless dual-observer based output feedback stabilization of linear systems with delays in the inputs and outputs. *IEEE Transactions on Cybernetics*, 1-12. doi: 10.1109/TCYB.2024.3403157 Open Access
11. Benes, P., Gregor, J., Michiels, W., Vyhlidal, T., Sika, S. (2024). Collocated and non-collocated active spatial absorbers for spatial flexible structures. *Mechanics Based Design of Structures and Machines*, 1-29. doi: 10.1080/15397734.2024.2361140 Open Access
12. Kure, M., Busek, J., Boussaada, I., Michiels, W., Niculescu, S-I., Vyhlidal, T. (2024). Robust delayed resonator with acceleration feedback design by double root assignment and experimental validation. *Journal of Sound and Vibration*, *576*, Art.No. 118261. doi: 10.1016/j.jsv.2024.118261 Open Access
13. Saldanha, A.F., Michiels, W., Kure, M., Busek, J., Vyhlidal, T. (2024). Stability optimization of time-delay systems with zero-location constraints applied to non-collocated vibration suppression. *Mechanical Systems and Signal Processing*, *208*, Art.No. 110886. doi: 10.1016/j.ymssp.2023.110886 Open Access
14. Li, H., Zhou, B., Michiels, W. (2024). Prescribed-time unknown Input observers design for singular systems: a periodic delayed output approach. *IEEE Transactions on Systems Man Cybernetics-Systems*, *54* (2), 741-751. doi: 10.1109/TSMC.2023.3320091 Open Access
15. Zhou, B., Zhang, Z., Michiels, W. (2024). Functional and dual observer based prescribed-time control of linear systems by periodic delayed feedback. *Automatica*, *159*, Art.No. 111406. doi: 10.1016/j.automatica.2023.111406 Open Access

16. Silm, H., Kure, M., Busek, J., Michiels, W., Vyhlidal, T. with Michiels, W. (corresp. author) (2024). Spectral Design and Experimental Validation of Noncollocated Vibration Suppression by a Delayed Resonator and Time-Delay Controller. *IEEE Transactions on Control Systems Technology*, *32* (1), 73-85. doi: 10.1109/TCST.2023.3297773 Open Access

17. Ding, Y., Zhou, B., Zhang, K-K., Michiels, W. (2023). Strong prescribed-time stabilization of uncertain nonlinear systems by periodic delayed feedback. *IEEE Transactions on Automatic Control*, 1-8. doi: 10.1109/TAC.2023.3347703 Open Access

18. Michiels, W., Niculescu, S-I., Boussaada, I. (2023). A complete characterization of minima of the spectral abscissa and rightmost roots of second-order systems with input delay. *IMA Journal of Mathematical Control and Information*, *40* (3), 403-428. doi: 10.1093/imamci/dnad020 Open Access

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22. Vite, L., Gomez, M.A., Mondie, S., Michiels, W. with Gomez, M.A. (corresp. author) (2022). Stabilisation of distributed time-delay systems: a smoothed spectral abscissa optimisation approach. *International Journal of Control*, *95* (11), 2911-2923. doi: 10.1080/00207179.2021.1943759 Open Access

23. Ruymbeek, K., Meerbergen, K., Michiels, W. with Ruymbeek, K. (corresp. author) (2022). Subspace method for multiparameter-eigenvalue problems based on tensor-train representations. *Numerical Linear Algebra with Applications 29* (5), Art.No. ARTN e2439. doi: 10.1002/nla.2439 Open Access

24. Vyhlidal, T., Michiels, W., Neusser, Z., Busek, J., Sika, Z. with Vyhlidal, T. (corresp. author) (2022). Analysis and optimized design of an actively controlled two-dimensional resonator. *Mechanical Systems and Signal Processing*, *178*, Art.No. ARTN 109195. doi: 10.1016/j.ymssp.2022.109195 Open Access

25. Mattenet, S.M., De Iuliis, V., Gomez, M.A., Michiels, W., Jungers, R.M. (2022). An improved finiteness test and a systematic procedure to compute the strong H2 norm of differential algebraic systems with multiple delays. *Automatica*, *144*, Art.No. 110495. doi: 10.1016/j.automatica.2022.110495 Open Access

26. Michiels, W. (2022). To filter or not to filter? Impact on stability of delay-difference and neutral equations with multiple delays. *IEEE Transactions on Automatic Control*, 1-7. doi: 10.1109/TAC.2022.3192327 Open Access

27. Ruymbeek, K., Meerbergen, K., Michiels, W. (2022). Tensor-Krylov method for computing eigenvalues of parameter-dependent matrices. *Journal of Computational and Applied Mathematics*, *408*, Art.No. 113869. doi: 10.1016/j.cam.2021.113869 Open Access

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31. Zhang, Z., Zhou, B., Michiels, W., Yang, X. with Zhou, B. (corresp. author) (2022). A novel act-and-wait control scheme for fixed-time stabilization of input-delay systems and assignment of the monodromy

matrix. *International Journal of Robust and Nonlinear Control 32* (2), 987-1003. doi: 10.1002/rnc.5866 Open Access

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