

# List of Publications\*

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## 1 Books

- [B1] L. Buşoniu, R. Babuška, B. De Schutter, and D. Ernst, *Reinforcement Learning and Dynamic Programming Using Function Approximators*. Boca Raton, Florida: CRC Press, ISBN 978-1-4398-2108-4, 270 pp., 2010.
- [B2] Zs. Lendek, T.M. Guerra, R. Babuška, and B. De Schutter, *Stability Analysis and Nonlinear Observer Design Using Takagi-Sugeno Fuzzy Models*. vol. 262 of *Studies in Fuzziness and Soft Computing*, Berlin, Germany: Springer, ISBN 978-3-642-16775-1, 196 pp., 2010.

## 2 International journal papers (published or accepted)

- [J1] Y. Li and B. De Schutter, “Stability and performance analysis of an irrigation channel with distributed control,” *Control Engineering Practice*, vol. 19, no. 10, pp. 1147–1156, Oct. 2011.
- [J2] S. Lin, B. De Schutter, Y. Xi, and H. Hellendoorn, “Fast model predictive control for urban road networks via MILP,” *IEEE Transactions on Intelligent Transportation Systems*, vol. 12, no. 3, pp. 846–856, Sept. 2011.
- [J3] Zs. Lendek, R. Babuška, and B. De Schutter, “Sequential stability analysis and observer design for distributed TS fuzzy systems,” *Fuzzy Sets and Systems*, vol. 174, no. 1, pp. 1–30, July 2011.

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\*See <http://pub.deschutter.info/> for the most up-to-date list of my publications.

- [J4] I. Alvarado, D. Limon, D. Muñoz de la Peña, J.M. Maestre, M.A. Ridaó, H. Scheu, W. Marquardt, R.R. Negenborn, B. De Schutter, F. Valencia, and J. Espinosa, “A comparative analysis of distributed MPC techniques applied to the HD-MPC four-tank benchmark,” *Journal of Process Control*, vol. 21, no. 5, pp. 800–815, June 2011.
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- [J6] A.N. Tarău, B. De Schutter, and J. Hellendoorn, “Predictive route control for automated baggage handling systems using mixed-integer linear programming,” *Transportation Research Part C*, vol. 19, no. 3, pp. 424–439, June 2011.
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- [J13] W.P.M.H. Heemels, B. De Schutter, J. Lunze, and M. Lazar, “Stability analysis and controller synthesis for hybrid dynamical systems,” *Philosophical Transactions of the Royal Society A*, vol. 368, no. 1930, p. 4937–4960, Nov. 2010.
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- [J15] Zs. Lendek, J. Lauber, T.M. Guerra, R. Babuška, and B. De Schutter, “Adaptive observers for TS fuzzy systems with unknown polynomial inputs,” *Fuzzy Sets and Systems*, vol. 161, no. 15, pp. 2043–2065, Aug. 2010.
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<sup>1</sup>For this paper we have been awarded the 2009 Andrew P. Sage Best Transactions Paper Award.

- [J38] T.J.J. van den Boom and B. De Schutter, "Modelling and control of discrete event systems using switching max-plus-linear systems," *Control Engineering Practice*, vol. 14, no. 10, pp. 1199–1211, Oct. 2006.
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### 3 National journal papers (published or accepted)

- [N1] Zs. Lendek, R. Babuška, and B. De Schutter, “Stability bounds for fuzzy estimation and control,” *Control Engineering and Applied Informatics*, vol. 12, no. 3, pp. 3–12, 2010.

- [N2] H. Hellendoorn, S.K. Zegeye, B. De Schutter, and E. Breunese, “Schoon en vlot snelwegverkeer,” *Verkeerskunde*, no. 7, p. 47, Nov. 2009. Summary. In Dutch. The full article can be found at <http://www.verkeerskunde.nl/milieuvriendelijkverkeersmanagement>.
- [N3] D. Doan, T. Keviczky, I. Necoara, M. Diehl, and B. De Schutter, “A distributed version of Han’s method for DMPC using local communications only,” *Control Engineering and Applied Informatics*, Special Issue on Distributed Control in Networked Systems, vol. 11, no. 3, pp. 6–15, 2009.
- [N4] A.N. Tarău, B. De Schutter, and J. Hellendoorn, “Centralized, decentralized, and distributed model predictive control for route choice in automated baggage handling systems,” *Control Engineering and Applied Informatics*, Special Issue on Distributed Control in Networked Systems, vol. 11, no. 3, pp. 24–31, 2009.
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- [N13] L. Ben-Naoum, R. Boel, L. Bongaerts, B. De Schutter, Y. Peng, P. Valckenaers, J. Vandewalle, and V. Wertz, “Methodologies for discrete event dynamic systems: A survey,” *Journal A*, vol. 36, no. 4, pp. 3–14, Dec. 1995.

#### 4 Contributions to books (published or accepted)

- [K1] A.N. Tarău, B. De Schutter, and J. Hellendoorn, “Hierarchical model-based control for automated baggage handling systems,” Tech. rep. 11-036, Delft Center for Systems and Control, Delft University of Technology, Delft, The Netherlands, 27 pp., Dec. 2010. Accepted for publication in *Distributed Decision Making and Control*, R. Johansson and A. Rantzer (editors), Springer, 2011, to appear.
- [K2] M. Arnold, R.R. Negenborn, G. Andersson, and B. De Schutter, “Distributed predictive control for energy hub coordination in coupled electricity and gas networks,” Chapter 10 in *Intelligent Infrastructures* (R.R. Negenborn, Z. Lukszo, and H. Hellendoorn, eds.), vol. 42 of *Intelligent Systems, Control and Automation: Science and Engineering*, Dordrecht, The Netherlands: Springer, ISBN 978-90-481-3598-1, pp. 235–273, 2010.
- [K3] L. Buşoniu, R. Babuška, and B. De Schutter, “Multi-agent reinforcement learning: An overview,” Chapter 7 in *Innovations in Multi-Agent Systems and Applications – 1* (D. Srinivasan and L.C. Jain, eds.), vol. 310 of *Studies in Computational Intelligence*, Berlin, Germany: Springer, pp. 183–221, 2010.
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- [K9] A. Bemporad, M.K. Çamlıbel, W.P.M.H. Heemels, A.J. van der Schaft, J.M. Schumacher, and B. De Schutter, “Further switched systems,” Chapter 5 in *Handbook of Hybrid Systems Control – Theory, Tools, Applications* (J. Lunze and F. Lamnabhi-Lagarrigue, eds.), Cambridge, UK: Cambridge University Press, ISBN 978-0-521-76505-3, pp. 139–192, 2009.
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## 7 PhD thesis

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