

Neurodynamics

- [1] E. Schöll, J. Lehnert, A. Keane, T. Dahms, and P. Hövel: *Control of desynchronization transitions in delay-coupled networks of type-I and type-II excitable systems* (Springer, Berlin, 2013).
- [2] D. P. Rosin, D. Rontani, D. J. Gauthier, and E. Schöll: *Control of synchronization patterns in neural-like Boolean networks*, Phys. Rev. Lett. **110**, 104102 (2013).
- [3] E. Schöll: *Synchronization in delay-coupled complex networks*, in *Advances in Analysis and Control of Time-Delayed Dynamical Systems* (World Scientific, Singapore, 2013), Ed. by J.-Q. Sun, Q. Ding, chap. 4, pp. 57–83, to be published.
- [4] J. Lehnert, T. Dahms, and E. Schöll: *Zero-lag and group synchronization in neural networks*, in *Proc. 2012 Internat. Symposium on Nonlinear Theory and its Applications (NOLTA2012)*, Palma de Mallorca (IEICE, Japan, 2012), pp. 66–69.
- [5] M. Bär, E. Schöll, and A. Torcini: *Synchronization and complex dynamics of oscillators with delayed pulse coupling*, Angew. Chem. Int. Ed. **51**, 9489 (2012).
- [6] A. Keane, T. Dahms, J. Lehnert, S. A. Suryanarayana, P. Hövel, and E. Schöll: *Synchronisation in networks of delay-coupled type-I excitable systems*, Eur. Phys. J. B **85**, 407 (2012).
- [7] A. Panchuk, D. P. Rosin, P. Hövel, and E. Schöll: *Synchronization of coupled neural oscillators with heterogeneous delays*, Int. J. Bif. Chaos (2012), in print (arXiv:1206.0789).
- [8] J. Lehnert, T. Dahms, P. Hövel, and E. Schöll: *Loss of synchronization in complex neural networks with delay*, Europhys. Lett. **96**, 60013 (2011).
- [9] N. Kouvaris, L. Schimansky-Geier, and E. Schöll: *Control of coherence in excitable systems by the interplay of noise and time-delay*, Eur. Phys. J. ST **191**, 29 (2010).
- [10] E. Schöll: *Neural control: Chaos control sets the pace*, Nature Physics **6**, 161 (2010).
- [11] A. Panchuk, M. A. Dahlem, and E. Schöll: *Regular spiking in asymmetrically delay-coupled FitzHugh-Nagumo systems*, Proc. NDES 09 pp. 177–179 (2009), arXiv:0911.2071v1.
- [12] P. Hövel, M. A. Dahlem, T. Dahms, G. Hiller, and E. Schöll: *Time-delayed feedback control of delay-coupled neurosystems and lasers*, in *Preprints of the Second IFAC meeting related to analysis and control of chaotic systems (CHAOS09)* (World Scientific, 2009), (arXiv:0912.3395).
- [13] S. A. Brandstetter, M. A. Dahlem, and E. Schöll: *Interplay of time-delayed feedback control and temporally correlated noise in excitable systems*, Phil. Trans. R. Soc. A **368**, 391 (2010).
- [14] P. Hövel, S. A. Shah, M. A. Dahlem, and E. Schöll: *Feedback-dependent control of stochastic synchronization in coupled neural systems*, Proc. 4th International Scientific Conference on Physics and Control (PhysCon 09), ed. L. Fortuna and M. Frasca, IPACS Open Access Library <http://lib.physcon.ru> (e-Library of the International Physics and Control Society) (2009), URL <http://arxiv.org/abs/0911.2334v1>.

- [15] E. Schöll, P. Hövel, V. Flunkert, and M. A. Dahlem: *Time-delayed feedback control: from simple models to lasers and neural systems*, in *Complex time-delay systems: theory and applications*, edited by F. M. Atay (Springer, Berlin, 2010), pp. 85–150.
- [16] M. A. Dahlem, R. Graf, A. J. Strong, J. P. Dreier, Y. A. Dahlem, M. Sieber, W. Hanke, K. Podoll, and E. Schöll: *Two-dimensional wave patterns of spreading depolarization: retracting, re-entrant, and stationary waves*, *Physica D* **239**, 889 (2010).
- [17] F. M. Schneider, E. Schöll, and M. A. Dahlem: *Controlling the onset of traveling pulses in excitable media by nonlocal spatial coupling and time delayed feedback*, *Chaos* **19**, 015110 (2009).
- [18] G. Florence, M. A. Dahlem, A. C. G. Almeida, J. W. M. Bassani, and J. Kurths: *The role of extracellular potassium dynamics in the different stages of ictal bursting and spreading depression: A computational study*, *J. Theor. Biol.* **258**, 219 (2009).
- [19] E. Schöll, G. Hiller, P. Hövel, and M. A. Dahlem: *Time-delayed feedback in neurosystems*, *Phil. Trans. R. Soc. A* **367**, 1079 (2009).
- [20] M. A. Dahlem, F. M. Schneider, and E. Schöll: *Failure of feedback as a putative common mechanism of spreading depolarizations in migraine and stroke*, *Chaos* **18**, 026110 (2008).
- [21] M. A. Dahlem, G. Hiller, A. Panchuk, and E. Schöll: *Dynamics of delay-coupled excitable neural systems*, *Int. J. Bifur. Chaos* **19**, 745 (2009).
- [22] P. Hövel, M. A. Dahlem, and E. Schöll: *Control of synchronization in coupled neural systems by time-delayed feedback*, *Int. J. Bifur. Chaos* **20**, 813 (2010).
- [23] P. Hövel, M. A. Dahlem, and E. Schöll: *Synchronization of noise-induced oscillations by time-delayed feedback*, in *Proc. 19th Internat. Conf. on Noise and Fluctuations (ICNF-2007)* (American Institute of Physics, College Park, Maryland 20740-3843, 2007), vol. 922, pp. 595–598, ISBN 0-7354-0432-8.
- [24] M. A. Dahlem, F. M. Schneider, and E. Schöll: *Efficient control of transient wave forms to prevent spreading depolarizations*, *J. Theo. Biol.* **251**, 202 (2008).
- [25] T. Prager, H. P. Lerch, L. Schimansky-Geier, and E. Schöll: *Increase of coherence in excitable systems by delayed feedback*, *J. Phys. A* **40**, 11045 (2007).
- [26] B. Hauschildt, N. B. Janson, A. G. Balanov, and E. Schöll: *Noise-induced cooperative dynamics and its control in coupled neuron models*, *Phys. Rev. E* **74**, 051906 (2006).
- [27] A. G. Balanov, N. B. Janson, and E. Schöll: *Control of noise-induced oscillations by delayed feedback*, *Physica D* **199**, 1 (2004).
- [28] N. B. Janson, A. G. Balanov, and E. Schöll: *Delayed feedback as a means of control of noise-induced motion*, *Phys. Rev. Lett.* **93**, 010601 (2004).