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**Information processing in complex networks**

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## List of publications

### Published work

1. S. Mei; R. Quax; D.A.M.C. van de Vijver; Y. Zhu and P.M.A. Sloot: Increasing risk behaviour can outweigh the benefits of antiretroviral drug treatment on the HIV incidence among men-having-sex-with-men in Amsterdam, *BMC Infectious Diseases*, vol. 11, nr 118 17 pages. 2011. (DOI: 10.1186/1471-2334-11-118)
2. R. Quax; D.A. Bader and P.M.A. Sloot: SEECN: SIMULATING COMPLEX SYSTEMS USING DYNAMIC COMPLEX NETWORKS, *International Journal for Multiscale Computational Engineering, Special Section*, vol. 9, nr 2 pp. 201-214. 2011. (DOI: 10.1615/IntJMultCompEng.v9.i2.50)
3. S. Mei; P.M.A. Sloot; R. Quax; Y. Zhu and W. Wang: Complex Agent Networks explaining the HIV epidemic among homosexual men in Amsterdam, *Mathematics and Computers in Simulation*, vol. 80, nr 5 pp. 1018-1030. Jan 2010. (DOI: 10.1016/j.matcom.2009.12.008)
4. R. Quax; D.A. Bader and P.M.A. Sloot: Simulating Individual-Based Models of Epidemics in Hierarchical Networks, in G. Allen; J. Nabrzyski; E. Seidel; G.D. van Albada; J.J. Dongarra and P.M.A. Sloot, editors, *Computational Science - ICCS 2009: 9th International Conference, Baton Rouge, LA, USA, Proceedings, Part I, International Conference on Computational Science 2009 (ICCS 2009)*, Baton Rouge, LA, USA, in series *Lecture Notes in Computer Science*, vol. 5544, pp. 725-734. Springer, Berlin, Heidelberg, May 2009. ISBN-13: 978-3-642-01969-2.

5. R. Quax and P.M.A. Slood: Information processing as a paradigm to model and simulate complex systems, *Journal of Computational Science*, vol. 3, nr. 5 pp. 247–249. September 2012. (DOI: 10.1016/j.jocs.2012.07.001)

### **In press**

1. R. Quax; A. Apolloni and P.M.A. Slood: Towards understanding the behavior of physical systems using information theory, *The European Physical Journal Special Topics*
2. R. Quax; D.A.M.C. van de Vijver; D. Frenz and P.M.A. Slood: Inferring epidemiological parameters from phylogenetic information for the HIV-1 epidemic among MSM, *The European Physical Journal Special Topics*

### **Submitted**

1. R. Quax; A. Apolloni and P.M.A. Slood: The diminishing role of highly connected units in the dynamical behavior of complex systems, submitted to *Journal of the Royal Society's Interface*
2. R. Quax; D. Kandhai and P.M.A. Slood: Information dissipation as an early-warning signal for the Lehman Brothers collapse in financial time series, submitted to *Nature's Scientific Reports*