

Publication List

Matthias Heymann, Duke University

April 26, 2010

Click on the links in this pdf file to download the papers.
(Be patient as downloading some papers can take 1-2 minutes.)

For brief summaries, visit www.matthiasheymann.de
(click on Mathematics, then on Papers & Publications).

- [1] M. Heymann, “[Existence and properties of minimum action curves for degenerate Finsler metrics](#),” *submitted to the Memoirs of the AMS*, 04/26/2010.
- [2] M. Heymann and E. Vanden-Eijnden, “The sources of rare transitions in continuous-time Markov jump processes,” *in preparation*, 2009.
- [3] M. Heymann and E. Vanden-Eijnden, “[The geometric minimum action method: A least action principle on the space of curves](#),” *Communications in Pure and Applied Mathematics*, vol. 61, pp. 1052–1117, August 2008.
- [4] E. Vanden-Eijnden and M. Heymann, “[The geometric minimum action method for computing minimum energy paths](#),” *Journal of Chemical Physics*, vol. 128, p. 061103, February 2008.
- [5] M. Heymann and E. Vanden-Eijnden, “[Pathways of maximum likelihood for rare events in nonequilibrium systems – Application to nucleation in the presence of shear](#),” *Physical Review Letters*, vol. 100, no. 14, p. 140601, 2007.
- [6] M. Heymann, *The geometric minimum action method: A least action principle on the space of curves*. PhD thesis, New York University, July 2007.
- [7] M. Heymann and M. Hansen, “[A model for the online time of network users](#).” Available at www.matthiasheymann.de, 2002.
- [8] M. Heymann and M. Hansen, “[A new set of sound commands for R; Sonification of the HMC algorithm](#),” in *ASA Proceedings, Statistical Computing Section*, pp. 1439–1443, 2002.
- [9] M. Heymann, “[The Stieltjes convolution and a functional calculus for non-negative operators](#).” Available at www.matthiasheymann.de, 2002.
- [10] M. Heymann, “[Fractional powers of operators, and their applications](#),” Master’s thesis, Leibniz Universität Hannover (Germany), November 2001.