

Publications of Jürg Hüsler

Books and Chapter of Books

1. **J. Hüsler and H. Zimmermann.** Statistische Prinzipien für medizinische Projekte. 2010, Huber, Bern. 5. ext. ed.
2. **M. Falk, J. Hüsler and R.D. Reiss.** Laws of small numbers: extremes and rare events. 3rd ed., revised and extend. Birkhäuser, Basel and Boston, 2010.
3. **J. Hüsler.** On Applications of Extreme Value Theory in Optimization. In *Experimental Methods for the Analysis of Optimization Algorithms*. Bartz-Beielstein, Th. Chiarandini, M., Pasquete, L. and Preuss, M., Eds., Springer (2010). p. 185-208.
4. **A. Gut and J. Hüsler.** Shock models. In *Advances in Degradation Modeling: Applications to Reliability, Survival Analysis, and Finance* Eds. Nikulin, M.S. et al.. Series Statistics for Industry and Technology, 2009, Birkhäuser, Basel, pp. 59-76.
5. **J. Hüsler.** On Applications of Extreme Value Theory in Optimization. In *Experimental Methods for the Analysis of Optimization Algorithms*. Bartz-Beielstein, Th. Chiarandini, M., Pasquete, L. and Preuss, M., Eds., Springer (2010).
6. **P. Cirillo and J. Hüsler.** Shock models and Firms' default: Parametric and Nonparametric Models. In *Festschrift T. Hettmansperger*. WSPC Proceedings (2010).
7. **J. Hüsler and H. Zimmermann.** Statistische Prinzipien für medizinische Projekte. 2006, Huber, Bern. 4. ext. ed.
8. **R. Baeza-Yates, J. Glaz, H. Gzyl, J. Hüsler and J.L. Palacios (Eds).** Recent advances in applied probability. Springer, New York, 2005.
9. **M. Falk, J. Hüsler and R.D. Reiss.** Laws of small numbers: extremes and rare events. 2nd ed., revised and extend. Birkhäuser, Basel and Boston, 2004.
10. **J.M.C. Häusler, H. Zimmermann, B. Tobler, B. Arnet and J. Hüsler.** Die volkswirtschaftlichen Kosten von Polytrauma. SUVA, Luzern.
11. **J. Hüsler and H. Zimmermann.** Statistische Prinzipien für medizinische Projekte. 2001, Huber, Bern. 3. ext. ed.
12. **J. Hüsler and H. Zimmermann.** How to design trials / studies? In *Conducting research in anaesthesia and intensive care medicine*. A. Zbinden and D. Thomas (Eds.), Butterworth-Heinemann. 2000
13. **J. Hüsler and K.D. Wernecke.** How do perform statistical analysis? In *Conducting research in anaesthesia and intensive care medicine*. A. Zbinden and D. Thomas (Eds.), Butterworth-Heinemann. 2000
14. **J. Hüsler (Ed).** Special issue on multivariate extreme value estimation with applications to economics and finance. *Communications in Statistics: Theory and Methods*. **25**(4), 1996.

15. **J. Hüsler and H. Zimmermann.** Statistische Prinzipien für medizinische Projekte. 1996, Huber, Bern. 2. ext. ed.
16. **M. Falk, J. Hüsler and R.D. Reiss.** Laws of small numbers: extremes and rare events. DMV-Seminar Series **23**, Birkhäuser, Basel and Boston, 1994.
17. **J. Hüsler and H. Zimmermann.** Statistische Prinzipien für medizinische Projekte. 1993, Huber, Bern.
18. **J. Hüsler and R.D. Reiss (Eds).** Extreme Value Theory. Proceedings Oberwolfach 1987. Lecture Notes in Statistics, Springer, Berlin.

Publications in peer-refereed journals since 2002

1. **P. Cirillo, M. Gallegati and J. Hüsler.** A Polya lattice model to study leverage dynamics and contagious financial fragility. To appear in *Advances in Complex Systems* (IF: 1.21).
2. **A. Freitas, J. Hüsler and M.G. Temido.** Limit laws for maxima of a stationary random sequence with random sample size. *TEST* **21** (2012) 116-131.
3. **S. Adler, A. Krivine, J. Weix, F. Rozenberg, O. Launay, J. Hüsler, L. Guillevin and P.M. Villiger** Protective effect of A/H1N1 vaccination in immune-mediated diseasea prospectively controlled vaccination study. *Rheumatology* (2012) 1-6.
4. **J. Rudolph, R.M. Bruckmaier, R. Kasimanickam, A. Steiner, M. Kirchhofer, J. Hüsler and G. Hirsbrunner.** Comparison of the effect of a CIDR-Select synch versus a long-term CIDR based AI protocol on reproductive performance in multiparous dairy cows in Swiss dairy farms. *Repro. Biol. Endocrinol.* **9**:151, on-line (2011).
5. **J. Hüsler, E. Romyantseva and V. Piterbarg.** Extremes of Gaussian processes with a smooth random variance. *Stoch. Proc. Appl.* **121** (2011) 2592-2605
6. **J. Hüsler, V. Piterbarg and Y. Zhang.** Extremes of Gaussian processes with random variance. *Elect. J. Probab.* **16** (2011) 1254-1280.
7. **J. Hüsler, D. Li and M. Raschke.** Estimation for the generalized Pareto distribution using maximum likelihood and goodness-of-fit. *Comm. Statistics - Theory and Methods.* (2011)
8. **P. Cirillo and J. Hüsler.** Generalized extreme shock models with a possibly increasing threshold. (2011). *Probability in the Engineering and Informational Sciences* **25**, 1-16.
9. **P. Cirillo, J. Hüsler and P. Muliere, P. .** A nonparametric approach to interacting failing systems with an application to credit risk modeling. *Intern. J. Theoretical Applied Finance* **13** (2010), 1223-1240.

10. **J. Hüsler, A. Ladneva and V. Piterbarg.** On clusters of high extremes of Gaussian stationary processes with ε -separation. *Elect. J. of Probability* **15** (2010) 1825-1861.
11. **P. Cirillo and J. Hüsler.** An urn-based approach to generalized extreme shock models. *Stat. Probab. Letters* **79** (2009) 969-976.
12. **P. Cirillo and J. Hüsler.** On the upper tail of Italian firms size distribution. *Physica A: Stat. Mechanics Appl.* **388** (2009) 1546-1554.
13. **J. Hüsler and D. Li.** Testing asymptotic independence in bivariate extremes. *J. Statist. Planning and Inference* **139** (2009) 990-998.
14. **J. Hüsler** Extreme Value Analysis in Biometrics. *Biom. J.* **51** (2009) 252-272.
15. **O. Krieger, G. Matuliene, J. Hüsler, G.E. Salvi, B. Pjetursson and U. Brägger.** Failures and Complications in patients with birth defects restored with fixed dental protheses and single crowns on teeth and/or implants. *Clin. Oral Implants Res.* **20(8)** (2009) 809-16.
16. **E. Incici, G. Matuliene, J. Hüsler, G.E. Salvi, B. Pjetursson and U. Brägger.** Total costs of longterm dental care in patients with birth defects restored with fixed dental protheses and single unit crowns on teeth and/or implants. *Clin. Oral Implants Res.* **20(7)** (2009) 715-721.
17. **E. Hashorva and J. Hüsler.** The number and sum of near m -extremes. *Albanian J. Math.* **2** (2008) 33-43.
18. **J. Hüsler and D. Li** Weak convergence of the empirical mean excess process with application to estimate the negative tail index. *Meth. Comput. Applied Probab.* **10** (2008) 577-593.
19. **J. Hüsler and V. Piterbarg.** A limit theorem for the time of ruin in a Gaussian ruin problem. *Stoch. Proc. Appl.* **118** (2008) 2014-2022.
20. **J. Hüsler and L. Peng.** Editorial: In honor of Laurens de Haan. *Extremes* **11** (2008) 1-2.
21. **J. Hüsler and Y. Zhang.** On first and last ruin times of Gaussian processes. *Stat. Probab. Letters* **78** (2008) 1230-1235.
22. **J. Hüsler and L. Peng.** Review of testing issues in extremes: in honor of Professor Laurens de Haan. *Extremes* **11** (2008) 99-111.
23. **W. Bischoff, E. Hashorva and J. Hüsler.** An asymptotic result for non crossing probabilities of Brownian motion with trend. *Comm. Statist. Theory and Methods* **36** (2007) 2821-2828.
24. **J. Hüsler and D. Li.** Tail Approximations to the Density Function in EVT. *Extremes* **9** (2006), 131-149.
25. **J. Hüsler and D. Li.** On Testing Extreme Value Conditions. *Extremes* **9** (2006), 69-86.
26. **A. Hall and J. Hüsler.** Extremes of stationary sequences with failures. *Stoch. Models* **22**, (2006) 537-557.

27. **J. Hüsler, D. Li and S. Müller.** Weighted least squares estimation of the extreme value index. *Statistics and Probability Letters*, **76** (2006), 920-930.
28. **J. Hüsler and Chr. Schmid.** Extreme values of a portfolio of Gaussian processes and a trend. *Extremes* **8** (2006) 171-189.
29. **W. Bischoff, E. Hashorva, J. Hüsler and F. Miller.** Analysis of a change-point regression problem in quality control by partial sums processes and Kolmogorov type tests. *Metrika* **62** (2005) 85-98.
30. **E. Hashorva and J. Hüsler.** Multiple maxima in multivariate samples. *Statist. Probab. Letters* **75** (2005) 11-17.
31. **A. Gut and J. Hüsler.** Realistic variation of shock models. *Stat. Probab. Letters* **74** (2005) 187-204.
32. **E. Scheurer, M. Ith, D. Dietrich, R. Kreis, J. Hüsler, R. Dirnhofer, C. Boesch.** Statistical evaluation of time-dependent metabolite concentrations: estimation of post-mortem intervals based on *in situ* 1H-MRS of the brain. *NMR in Biomedicine* **18** (2005) 163-172.
33. **G. Ehling, M. Hecht, A. Heusener, J. Hüsler, A.O. Gamer, H. van Loveren, Th. Maurer, K. Riecke, L. Ullmann, P. Ulrich, R. Vandenbriel, H.-W. Vohr.** An European inter-laboratory validation of alternative endpoints of the murine local lymph node assay: 2nd round. *Toxicology* **212** (2005) 69-79.
34. **G. Ehling, M. Hecht, A. Heusener, J. Hüsler, A.O. Gamer, H. van Loveren, Th. Maurer, K. Riecke, L. Ullmann, P. Ulrich, R. Vandenbriel, H.-W. Vohr.** An European inter-laboratory validation of alternative endpoints of the murine local lymph node assay: First round. *Toxicology* **212** (2005) 60-68.
35. **J. Hüsler and S. Müller.** Iterative estimation of the extreme value index. *Meth. Comput. Appl. Probab.* **7** (2005) 139-148.
36. **E. Hashorva and J. Hüsler.** Estimation of tails and related quantities using the number of near-extremes. *Comm. in Statist. Theory Meth.* **34** (2004) 337-349.
37. **J. Hüsler and V. Piterbarg.** Limit theorem for maximum of the storage process with fractional Brownian motion as input. *Stoch. Proc. Appl.* **114** (2004) 231-250.
38. **J. Hüsler and V. Piterbarg.** On the ruin probability for physical fractional Brownian motion. *Stoch. Proc. Appl.* **113** (2004) 315-332.
39. **J. Hüsler.** Dependence between extreme values of discrete and continuous time locally stationary Gaussian processes. *Extremes* **7** (2004) 189-190.
40. **W. Bischoff, E. Hashorva, J. Hüsler and F. Miller.** On the power of the Kolmogorov test to detect the trend of a Brownian bridge with applications to a change-point problem in regression models. *Stat. and Probab. Letters* **66** (2004) 105-115.
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45. **W. Bischoff, F. Miller, E. Hashorva and J. Hüsler.** Asymptotics of a boundary crossing probability of a Brownian bridge with a general trend. *Meth. Comp. Appl. Probab.* **5** (2003), 271-288.
46. **J. Hüsler, P. Cruz, A. Hall and C. de Fonseca.** On Optimization and Extreme Value Theory. *Meth. Comp. Appl. Probab.* **5** (2003), 183-195.
47. **J. Hüsler, J. Möttönen and H. Oja.** Multivariate nonparametric tests in a randomized complete block design. *Multiv. Analysis* **85** (2003), 106-129.
48. **C.A. Redaelli, J.F. Dufour, M. Wagner, M. Schilling, J. Hüsler, L. Krähenbühl, M.W. Büchler and J. Reichen.** Preoperative galactose elimination capacity predicts complications and survival after hepatic resection. *Ann. Surgery* **235**, (2002) 77-85.
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51. **E. Hashorva and J. Hüsler.** Remarks on compound Poisson approximation of Gaussian random sequences. *Statist. Probab. Letters* **57** (2002), 1-8.
52. **J. Hüsler, R. Liu and K. Singh.** A formula for the tail probability of a multivariate normal distribution and its applications. *J. Multivariate Analysis* **82** (2002) 422-430.