References

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References

Angus, J.E. (1993). Asymptotic theory for bootstrapping the extremes. *Commun. Statist. Theory Meth.* **22**, 15–30.

Bacro, J.N. and Brito, M. (1993). Strong limiting behaviour of a simple tail Pareto-index estimator. *Statist. Dec.* (Suppl. **3**), 133–143.

Bacro, J.N. and Brito, M. (1995). Weak limiting behaviour of a simple tail Pareto-index estimator. *J. Statist. Plann. Inference* **45**, 7–19.

Bacro, J.N. and Brito, M. (1998). A tail bootstrap procedure for estimating the tail Pareto-index. *J. Statist. Plann. Inference* **71**, 245–260.

Billingsley, P. (1968). *Convergence of Probability Measures.* Wiley: New York.

Beirlant, J., Broniatowski, M., Teugels, J.L. and Vynckier, P. (1995). The mean residual life function at great age: Applications to tail estimation, *J. Statist. Plann. Inference* **45**, 21-48.

Beirlant, J. and Devroye, L. (1999). On the impossibility of estimating densities in the extreme tail. *Statist. Probab. Lett.* **43**, 57–64.

Beirlant, J., Dierckx, G., Goegebeur, Y. and Matthys, G. (1999). Tail index estimation and an exponential regression model. Preprint.

Beirlant, J., Teugels, J. L. and Vynckier, P. (1998). Some thoughts on extreme values. Probability towards 2000 (New York, 1995), 58–73, *Lecture Notes in Statist.* **128**. Springer-Verlag: New York.

Beirlant, J. and Teugels, J. L. (1987). Asymptotic normality of Hill's estimator. In: *Extreme Value Theory* (editors ???), Proceedings of the Oberwolfach Conference. Springer-Verlag: New York.

Beirlant, J., Vynckier, P. and Teugels, J. L. (1996). Tail index estimation, Pareto quantile plots and regression diagnostics. *J. Amer. Statist. Assoc.* **91**, 1659–1667.

Bingham, N.H., Goldie, C.M. and Teugels, J.L. (1987). *Regular Variation.* Encyclopedia of Mathematics and its Applications. Cambridge University Press: Cambridge.

Breiman, L., Stone, C.J. and Kooperberg, C. (1990). Robust confidence bounds for extreme upper quantiles. *J. Statist. Comput. Simul.* **37**, 127–149.

Broniatowski, M. (1993). On the estimation of the Weibull tail coefficient. *J. Statist. Plann. Inference* **35**, 349–365.

Castillo, E. (1988) *Extreme Value Theory in Engineering.* Statistical Modeling and Decision Science. Academic Press: New York.

Castillo, E. and Hadi, A. (1997). Fitting the generalized Pareto distribution to data. *J. Amer. Statist. Assoc.* **92**, 1609–1620.

Caers, J., Beirlant, J. and Vynckier, P. (1998). Bootstrap confidence intervals for tail indices. *Comput. Statist. Data Anal.* **26**, 259–277.

Caers, J., Vynckier, P., Beirlant, J. and Rombouts, L. (1996). Extreme-value analysis of diamond size distributions. *Math. Geology* **28**, 25–43.

Cohen, J.P. (1984). The asymptotic behaviour of the maximum likelihood estimates for univariate extremes. In: *Statistical Extremes and Applications* (J. Tiago de Oliveira, ed.), 435–442. Reidel: Dordrecht.

Cohen, J.P. (1986). The asymptotic behaviour of the maximum likelihood estimates for univariate extremes. *Sankhya Ser. A* **48**, 372–392.

Csörgö, M., Csörgö, S., Horváth, L. and Mason, D.M. (1986a). Weighted empirical and quantile process. *Ann. Probab.* **14**, 31–85.

Csörgö, M., Csörgö, S., Horváth, L. and Mason, D.M. (1986b). Normal and stable convergence of integral functions of the empirical distribution function. *Ann. Probab.* **14**, 86–118.

Csörgö, S., Deheuvels, P. and Mason, D.M. (1985). Kernel estimates for the tail index of a distribution. *Ann. Statist.* **13**, 1050–1077.

Csörgö, S. and Mason, D.M. (1985). Central limit theorems for sums of extreme values. *Proc. Cambridge Philos. Soc.* **98**, 547–558.

D'Agostino, R.B. and Stephens, M.A. (1986). *Goodness-of-Fit Techniques.* Statistics, Textbooks and Monographs **68**. Marcel Dekker: New York and Basel.

Danielsson, J., de Haan, L., Peng, L. and de Vries, C.G. (1999). Using a bootstrap method to choose the sample fraction in the tail index estimation. Preprint.

Davis, R. and Resnick, S. (1984). Tail estimates motivated by extreme-value theory. *Ann. Statist.* **12**, 1467–1487.

Davison, A.C. (1984). Modelling excesses over high thresholds, with an application. In: *Statistical Extremes and Applications* (J. Tiago de Oliveira, ed.), 461–482. Reidel: Dordrecht.

Davison, A.C. and Smith, R.L. (1990). Models for exceedances over high thresholds. *J. Roy. Statist. Soc. Ser. B* **52**, 393–442.

de Haan, L. (1970) *On Regular Variation and its Applications to the Weak Convergence of Sample Extremes.* Mathematical Centre Tract **32**. CWI: Amsterdam.

de Haan, L. (1984). Extreme-value statistics. *Extreme Value Theory and Applications* (J. Galambos, ed.), 93–122.

de Haan, L. (1996). Von Mises-type conditions in second-order regular variation. *Journal of Mathematical Analysis and its Applications* **197**, 400–410.

de Haan, L., Pereira, T.T. (1999). Estimating the index of a stable distribution. *Statist. Probab. Lett.* **41**, 39–55.

de Haan, L. and Resnick, S.I. (1980). A simple asymptotic estimate for the index of a stable distribution. *J. Roy. Statist. Soc. Ser. B)* **42**, 83–87.

de Haan, L. and Resnick, S.I. (1996). Second-order regular variation and rates of convergence in extreme-value theory. *Ann. Probab.* **24**, 97–124.

de Haan, L. and Rootzén, H. (1993). On the estimation of high quantiles. *J. Statist. Plann. Inference* **35**, 1–13.

de Haan, L. and Stadtmüller, U. (1996). Generalized regular variation of second-order. *J. Austral. Math. Soc. Ser. A* **61**, 381–395.

Deheuvels, P., Haüsler, E. and Mason, D.M. (1988). Almost sure convergence of the Hill estimator. *Math. Proc. Cambridge Philos. Soc.* **104**, 371–381.

Deheuvels, P., Mason, D.M. and Shorack, G.R. (1993). Some results on the influence of extremes on the bootstrap. *Ann. Inst. H. Poincaré (Probab. Statist.)* **29**, 83–103.

Dekkers, A.L.M. and de Haan, L. (1989). On the estimation of the extreme-value index and large quantile estimation. *Ann. Statist.* **17**, 1795–1832.

Dekkers, A.L.M. and de Haan, L. (1993). Optimal choice of sample fractions in extreme-value estimation. *J. Multivariate Anal.* **47**, 173–195.

Dekkers, A.L.M., Einmahl, J.H.J. and de Haan, L. (1989). A moment estimator for the index of an extreme value distribution. *Ann. Statist.* **17**, 1833–1855.

Diebolt, J., Durbec, V., El Aroui, M.A. and Villain, B. (1999). Estimation of extreme quantiles: empirical tools for method assessment and comparison. *International Journal of Reliability, Quality and Safety Engineering.* To appear.

Diebolt, J. and Zuber, J. (1999). Goodness-of-fit tests for nonlinear heteroscedastic regression models. *Statist. Probab. Lett.* **42**, 53–60.

Dijk, V. and de Haan, L. (1992). On the estimation of the exceedance probability of a high level. In: *Order Statistics and Nonparametrics: Theory and Applications* (P.K. Sen and I.A. Salama, eds.), 79–89. Elsevier: Amsterdam.

Ditlevsen, O. (1994). Distribution arbitrariness in structural reliability. In: *Structural Safety and Reliability.* (Schuller, Shinozuka and Yao, eds.), 1241–1247. Balkema: Rotterdam.

Draisma, G. and de Haan, L. (1996). An estimator for the extreme-value index. *Commun. Statist. Theory Meth.* **25**, 685–694.

Draisma, G., de Haan, L., Peng, L. and Pereira, T.T. (1999). A bootstrap-based method to achieve optimality in estimating the extreme-value index. Preprint

Drees, H. (1995). Refined Pickands estimators of the extreme-value index. *Ann. Statist.* **23**, 2059–2080.

Drees, H. (1998a). Optimal rates of convergence for estimates of the extreme-value index. *Ann. Statist.* **26**, 434–448.

Drees, H. (1998b). On smooth statistical tail functionals. *Scand. J. Statist.* **25**, 187–210.

Drees, H. and Kaufmann, E. (1998). Selecting the optimal sample fraction in univariate extreme-value estimation. *Stoch. Proc. Applications* **75**, 149–172.

DuMouchel, W. (1973). On the asymptotic normality of the maximum-likelihood estimate when sampling from a stable distribution. *Ann. Statist.* **1**, 948–957.

DuMouchel, W. (1983). Estimating the stable index α in order to measure the tail thickness. *Ann. Statist.* **11**, 1019–1036.

Einmahl, J.H.J. (1990). The empirical distribution function as a tail estimator. *Statist. Neerlandica* **44**, 79–82.

Einmahl, J.H.J. and Mason, D.M. (1988a). Laws of the iterated logarithm in the tails for weighted uniform empirical processes. *Ann. Probab.* **16**, 126–141.

Einmahl, J.H.J. and Mason, D.M. (1988b). Strong limit theorems for weighted quantile processes. *Ann. Probab.* **16**, 1623–1643.

Embrechts, P., Klüpperberg, C. and Mikosch, T. (1997). *Modelling Extremal Events for Insurance and Finance.* Applications of Mathematics, Stochastic Modelling and Applied Probability **33**. Springer-Verlag: Berlin.

Falk, M. (1988). Weak convergence of the bootstrap process for large quantiles. *Statist. Dec.* **6**, 385–396.

Falk, M. (1992). Bootstrapping the sample quantile: a survey in bootstrapping and related techniques. In: *Lecture Notes in Economics and Math. Systems* **376**. Springer-Verlag: New York.

Falk, M. (1995). On testing the extreme-value index via the POT method. *Ann. Statist.* **23**, 2013–2035.

Falk, M. and Reiss, R.D. (1989). Weak convergence of smoothed and nonsmoothed bootstrap quantile estimates. *Ann. Probab.* **17**, 362–371.

Geluk, J. and de Haan, L. (1987) *Regular Variation, Extensions and Tauberian Theorems.* Mathematical Centre Tract **40**. CWI: Amsterdam.

Girard, S. and Diebolt, J. (1999). Consistency of the ET method and smooth variations. *C. R. Acad. Sci. Paris (Série I)* **329**, 821–826.

Goldie, C.M. and Smith, R.L. (1987). Slow variation with remainder: A survey of the theory and its applications. *Quart. J. Math. Oxford Ser. (2)* **38**, 45–71.

Guida, M. and Longo, M. (1988). Estimation of probability tails based on generalized extreme-value distributions. *Reliability, Engineering and System Safety* **20**, 219–242.

Haüsler, E. and Teugels, J.L. (1985). On asymptotic normality of Hill's estimator for the exponent of regular variation. *Ann. Statist.* **13**, 743–756.

Hall, P.G. (1982). On some simple estimates of an exponent of regular variation. *J. Roy. Statist. Soc. Ser. B* **44**, 37–42.

Hall, P.G. (1990a). Asymptotic properties of the bootstrap for heavy-tailed distributions. *Ann. Proba.* **18**, 1342-1360.

Hall, P.G. (1990b). Using the bootstrap to estimate mean squared error and select smoothing parameters in nonparametric problems. *J. Multivariate Anal.* **32**, 177–203.

Hall, P.G. and Welsh, A.H. (1984). Best attainable rates of convergence for estimates of parameters of regular variation. *Ann. Statist.* **12**, 1079–1084.

Hall, P.G. and Welsh, A.H. (1985). Adaptive estimates of parameters of regular variation. *Ann. Statist.* **13**, 331–341.

Hill, B.M. (1975). A simple general approach to inference about the tail of a distribution. *Ann. Statist.* **3**, 1163–1174.

Hosking, J. and Wallis, J. (1987). Parameter and quantile estimation for the generalized Pareto distribution. *Technometrics* **29**, 339–349.

Hughey, R.L. (1991). A survey and comparison of methods for estimating extreme right tail-area quantiles. *Commun. Statist. Theory Meth.* **20**, 1463–1496.

Lall, U., Moon, Y. and Bosworth, K. (1993). Kernel flood frequency estimators: bandwith selection and kernel choice. *Water Resources Research* **29**, 1003–1016.

Mason, D.M. and Einmahl, U. (1992). Approximations to permutations and exchangeable processes. *Journal of Theoretical Probability* **5**, 101–126.

Moon, Y. and Lall, U. (1994). A kernel quantile function estimator for flood frequency analysis. *Water Resources Research* **30**, ???

Moon, Y., Lall, U. and Bosworth, K. (1993). Comparison of tail probability estimators for flood frequency analysis. *Journal of Hydrology* **151**, 343–363.

Omey, E. and Willekens, E. (1988). π-variation with remainder. *J. London Math. Soc.* **37**, 105–118.

Pereira, T.T. (1993). Second-order behaviour of domains of attraction and the bias of generalized Pickands' estimator. In: *Extreme Value Theory and Applications III* (J. Galambos, J. Lechner and E. Simin, eds.), 165–177. Proceedings of the Gathersburg Conference. NIST special publication **866**, Washington.

Pickands III, J. (1975). Statistical inference using extreme order satistics. *Ann. Statist.* **3**, 119–131.

Porter III, J.E. Coleman, J.W. and Moore, A.M. (1992). Modified KS, AD and C-vM tests for the Pareto distribution with unknown location and scale parameters. *IEEE Trans. on Reliability* **41**, 112–117.

Schultze, J. and Steinebach, J. (1996). On least squares estimates of an exponential tail coefficient. *Statist. Dec.* **14**, 353–372.

Shorack, G.R. and Wellner, J.A. (1986). *Empirical Processes with Applications to Statistics.* Wiley: New York.

Smith, R.L. (1984). Threshold methods for quantile extremes. In: *Statistical Extremes and Applications* (J. Tiago de Oliveira, ed.), 621–638. Reidel: Dordrecht.

Smith, R.L. (1987). Estimating tails of probability distributions. *Ann. Statist.* **15**, 1174–1207.

Smith, R.L. and Weissman, I. (1987). Large deviations of tail estimators based on the Pareto approximation. J. Appl. Prob. **24**, 619–630.

Smith, R.L. and Weissman, I. (1994). Estimating the extremal index. *J. Roy. Statist. Soc. Ser. B* **56**, 515–528.

Stute, W. (1997). Nonparametric model checks for regression. *Ann. Statist.* **25**, 613–641.

Swanepoel, J.W.H. (1986). A note in proving that the (modified) bootstrap works. *Commun. Statist. Theory Meth.* **15**, 3193–3203.

Teugels, J.L. (1984). Extreme values in insurance mathematics. In: *Statistical Extremes and Applications* (J. Tiago de Oliveira, ed.), 253–259. Reidel: Dordrecht.

Wellner, J.A. (1978). Limit theorems for the ratio of the empirical distribution function to the true distribution function. *Z. Wahrsch. verw. Gebiete* 45, 73–88.