

INTRODUCTION AUX VALEURS EXTRÊMES MULTIVARIÉES - QUELQUES RÉFÉRENCES -

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GT Théorie des valeurs extrêmes de Jussieu du 7 novembre 2013

MANUELS

- *J. Beirlant, Y. Goegebeur, J. Segers, and J. Teugels. Statistics of extremes : theory and applications. John Wiley & Sons Inc, 2004*
 - ➔ très bien écrit, contient deux chapitres (8 et 9) exclusivement dédiés au multivarié et donne un très bon aperçu des différentes approches existantes
- *S.I. Resnick. Heavy-tail phenomena : probabilistic and statistical modeling. Springer Verlag, 2007*
 - ➔ détaille l'approche variation régulière multivariée
- *S.I. Resnick. Extreme values, point processes and regular variation. Springer Verlag, New York, 1987*
 - ➔ bon complément au livre de 2007 cité ci-dessus
- *L. De Haan and A. Ferreira. Extreme value theory : an introduction. Springer Verlag, 2006*
 - ➔ très complet, donne toutes les démonstrations mathématiques en détail, mais dispense peu d'informations sur le multivarié
- *P. Embrechts, C. Klüppelberg, and T. Mikosch. Modelling extremal events : for insurance and finance, volume 33. Springer, 2011*
 - ➔ axé univarié et séries temporelles mais donne les bases nécessaires pour aborder le cadre multivarié
- *N.H. Bingham, C.M. Goldie, and J.L. Teugels. Regular Variation. Encyclopedia of Mathematics and its applications. Cambridge Univ Press, Cambridge, 1987*
 - ➔ encyclopédie de la variation régulière

REVUES DE LA LITTÉRATURE

Consulter le site Internet de la revue Revstat :

<http://www.ine.pt/revstat/tables.html>.

Les volumes 10, No. 1 (mars 2012) et 6, No. 1 (mars 2008) en particulier sont entièrement dédiés à la théorie des valeurs extrêmes.

ARTICLES SPÉCIALISÉS

Mesures de dépendance extrême

- *B. Abdous and K. Ghoudi. Non-parametric estimators of multivariate extreme dependence functions. J. Nonparametr. Statist., 17(8) :915–935, 2005. ISSN 1048-5252*
- *S. Coles, J. Heffernan, and J. Tawn. Dependence measures for extreme value analyses. Extremes, 2(4) :339–365, 1999. ISSN 1386-1999*
- *M. Falk and R. Michel. Testing for tail independence in extreme value models. Ann. Inst. Statist. Math., 58(2) :261–290, 2006. ISSN 0020-3157*
- *A.W. Ledford and J.A. Tawn. Statistics for near independence in multivariate extreme values. Biometrika, 83(1) :169, 1996. ISSN 0006-3444*
- *A. Ramos and A. Ledford. A new class of models for bivariate joint tails. J. R. Stat. Soc. Ser. B Stat. Methodol., 71(1) :219–241, 2009*
- *A. Ramos and A. Ledford. An alternative point process framework for modeling multivariate extreme values. Comm. Statist. Theory Methods, 40(12) :2205–2224, 2011*

Variation régulière et variation régulière cachée

- *B. Das and S.I. Resnick. Detecting a conditional extreme value model. Extremes, 14(1) : 29–61, 2011*
- *B. Das, A. Mitra, and S.I. Resnick. Living on the multidimensional edge : seeking hidden risks using regular variation. Advances in Applied Probability, 45(1) :139–163, 2013*
- *J. Heffernan and S.I. Resnick. Hidden regular variation and the rank transform. Adv. in Appl. Probab., 37(2) :393–414, 2005*

- *H. Hult and F. Lindskog. Regular variation for measures on metric spaces. Publ. Inst. Math.(Beograd)(NS), 80(94) :121–140, 2006*
- *S.I. Resnick. Hidden regular variation, second order regular variation and asymptotic independence. Extremes, 5(4) :303–336, 2002*
- *S.I. Resnick. Multivariate regular variation on cones : application to extreme values, hidden regular variation and conditioned limit laws. Stochastics, 80(2-3) :269–298, 2008*

Estimation non-paramétrique de la mesure spectrale

- *M.O. Boldi and A.C. Davison. A mixture model for multivariate extremes. Journal of the Royal Statistical Society : Series B (Statistical Methodology), 69(2) :217–229, 2007*
- *J.H.J. Einmahl, L. de Haan, and V.I. Piterbarg. Nonparametric estimation of the spectral measure of an extreme value distribution. Ann. Statist., pages 1401–1423, 2001. ISSN 0090-5364*
- *J.H.J. Einmahl and J. Segers. Maximum empirical likelihood estimation of the spectral measure of an extreme-value distribution. Ann. Statist., 37(5B) :2953–2989, 2009*
- *S. Guillotte, F. Perron, and J. Segers. Non-parametric Bayesian inference on bivariate extremes. Journal of the Royal Statistical Society : Series B (Statistical Methodology), 73(3) :377–406, 2011*
- *L. de Haan. Extremes in higher dimensions : the model and some statistics. In In Proceedings of 45th session international statistics institute, (paper 26.3). The Hague : International Statistical Institute. Z. Zhang de, pages 317–337, 1985*
- *A. Sabourin and P. Naveau. Dirichlet Mixture model for multivariate extremes. 2012*

Choix d'un rayon optimal

- *C. Stărică. Multivariate extremes for models with constant conditional correlations. J. Empir. Financ., 6(5) :515–553, 1999. ISSN 0927-5398*