

Selected publications

Books

- [1] Mixing: properties and examples, Lecture Notes in Statistics 85, Springer-Verlag, 1994.
- [2] Theory and Applications of Long-range Dependence, Paul Doukhan, Georges Oppenheim and Murad S. Taqqu editors (718 pages) Birkhäuser, Boston (2003).
- [3] Course of Mathematical Analysis with Jean Claude Sifre in French, Editions Dunod
 - « Analyse réelle et intégration », 380 pages (2001),
 - « Calcul différentiel, intégration et probabilités », 486 pages (2002).
- [4] Dependence in Probability and Statistics, Patrice Bertail, Paul Doukhan, and Philippe Soulier, eds. Lecture Notes in Statistics **187**, Springer, New York (500 pages) (2006).
- [5] Weak dependence: models, theory and applications (350 pages), Lecture Notes **190** in Statistics, Springer-Verlag, with G. Lang, C. Priour, S. Louhichi, J. Dedecker, J. R. León (2007).
- [6] Dependence in Statistics and Econometry, Gabriel Lang, Paul Doukhan, Donatas Surgailis and Gilles Teyssière, eds., Springer, New York (2010).

Publications

(72 published papers, hereafter follows a selection of those papers, see also my top-10 publications)

- with F. Portal, J. R. León. A measure of the quadratic deviation of nonparametric estimators. Annales Institut.H.Poincaré, Probability & Statistics **22**-1, 37-66 (1986).
- with J. R. León, J.L. Nicolle. Metodologia para evaluar la sismicidad cuando la base de datos es incompleta. Revista Tecnica INTEVEP **8**.1, 13-22 (1988)
- Formes de Toëplitz associées à une analyse multi-échelle. C.R.A.S. Série 1 **306**-5, 663-666 (1988).
- with E. Gassiat. Quadratic deviation of penalized mean square regression estimates. Journal of Multivariate Analysis **41**-1, 89-101 (1992).
- with J. R. León. Quadratic deviation of projection density estimates. Re.Bra.P.E. 7-1, 37-63 (1993).
- with P. Massart, E. Rio. The functional central limit theorem for weakly dependent processes. Annales Institut.H.Poincaré, Probability & Statistics **30**-1, 63-82 [25 citations mathscinet] (1994).
- with A. Tsybakov. Estimation in non parametric A.R.X. models in Russian: Problemy Peredachi Informatsii, 24-34, 1993- Problems of Trans. of Inform. **29**-4, 318-327 (1994).
- with P. Massart, E. Rio. Invariance principle for the empirical measure of a weakly dependent process. Annales Institut.H.Poincaré, Probability & Statistics **31**-2, 393-427 [25 citations mathscinet] (1995).
- with F. Gamboa. Prohorov rates in super-resolution. Canadian J. of Math. **48**-2, 316-329, (1996).
- with J. León. Asymptotics for the local time of a Gaussian random field. Acta Mathematica Hungarica **70**-4, 329-351 (1996).
- with D. Surgailis. Functional Central Limit Theorem for the empirical process of a short memory linear process. C.R.A.S. Série 1 **326**-1, 87-92 (1998).
- with S. Louhichi. A new weak dependence condition and applications to moment inequalities. Stochastic Processes and Applications **84**, 313-342 [39 citations mathscinet] (1999).
- with S. Louhichi. Functional estimation for weakly dependent stationary time series. Scandinavian J. of Statistics **28**-2, 325-342 [7 citations mathscinet] (2001).
- with P. Ango Nze, Weak dependence, models and applications to econometrics. Econometric Theory **20**-6, 995-1045 (2004).
- with J.R. León. Asymptotics for L^p -deviation of a variance estimator under diffusion. ESAIM P&S **8**, 132-149 (2004).

- with B. Ycart, Y. Couplier. 0-1 laws for dependent images, *Alea Probab. Statist* **2**, 157-175 (2006).
- with A. Latour and D. Oraichi. Simple integer-valued bilinear time series model. *Advances in Applied Probability* **3-28**, 559-578 (2006).
- with O. Wintenberger. A central limit theorem under non causal weak dependence and sharp moment assumptions, *Probability and Mathematical Statistics* **27**, 45-73 (2007).
- with J. M. Bardet, G. Lang, N. Ragache. A Lindeberg central limit theorem for dependent processes and its statistical applications, *ESAIM P&S* **12**, 154-172 (2008).
- with G. Lang, D. Surgailis. Limit theorems for sums of non linear function of ARFIMA processes with random Hurst exponents and Gaussian innovations, *Lithuanian Math. J.* **47-1**, 1-25 (2007).
- with J. M. Bardet, J. R. León. A uniform central limit theorem for the periodogram and its applications to Whittle parametric estimation for weakly dependent time series, *J. Time Ser. Anal* **29-5**, 906-945 (2008).
- with M. Neumann. The notion of weak dependence and its applications to bootstrapping time series, *Probability Surveys* **5**, 146-168 (2008).
- with G. Lang. Evaluation for moments of a ratio with application to regression estimation, *Bernoulli* **15-4**, 1259-1286 (2009).