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Born on february 7, 1955, Constantine, Algeria
Married 2 children, french nationality

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A. Research area

My work is centred on the dependence of stochastic processes. Dependence of the times series is an essential feature of real applications. Very specific problems occur with this particular and natural property. Dependence under consideration concern together time series, continuous time processes, random fields of space-time processes. This means that random observations are respectively observed according discrete epochs like years or seconds, or continuously; and respectively observations are geographic (according to some graph relations) or even combining geographic and time indices.

A first and really important problem is the way to define the dependence conditions. Null risk properties were first introduced through the Martingale conditions. This word comes in fact from Casino games and is aimed at describing techniques to win! Such conditions are thus restrictive concerning applications.

In 1956 Pr. Murray Rosenblatt introduced a strong mixing condition extending on those from ergodic theory. A huge success of such notions is due to its simplicity and to the powerful range of mathematical applications of those notions. Econometricians especially appreciated mixing setting. I also worked during years with those notions and my monograph on mixing is among the most widely cited in this domain (771 citations on google scholar).

A very simple of an autoregressive model with discrete inputs was exhibited in 1984 by Donald Andrews. To my eyes, this example definitely reduces the importance of mixing for concrete applications. I thus introduced a new and very simple notion of weak dependence in 1999 with Sana Louhichi, a collective volume is devoted to this notion in 2007. This notion is definitely a fruitful one.

The asymptotic properties of weak or strong dependence are central in my research work. I am very involved in the problem of modelling times series with specific properties.

- I introduced several nonlinear models exhibiting distributional long range dependence and the monograph [2] is a main reference for long range dependence.
- For the weakly dependent case, my monograph [1] is among the most cited reference for mixing and a recent work (see the monograph [5]) proposes a real alternative to mixing to measure weak dependence.

Limit theorems in probability associated to such conditions are thus studied for applications sake. Problems related to non-parametric estimation are clearly direct applications of those questions. One may think of fitting in order to resample or forecasting problems. Applications to statistics, finance or stochastic algorithms were already worked out but a lot remains to complete the consequences of my theoretical work.

B. Curriculum vitæ

1975-1979 Fellow at E.N.S. Saint-Cloud.

1976-1977 D.E.A. Statistics University Paris-Sud Orsay.

1977-1978 French competition for highshool professors in Mathematics ranking 11th].

1979-1980 Fellowship D.G.R.S.T.

1980 PhD : Processus autorégressifs non linéaires, advisor: J. Bretagnolle, Paris-Sud, Orsay.

1980-1981 Internship for professors in highshools [Academy of Versailles].

1981-1982 Assistant Professor Rouen University

1982-1983 Researcher C.N.R.S.

1983-1993 Full position of researcher C.N.R.S.

1986 Habilitation : Etude de Processus mélangeants, advisor: D. Dacunha-Castelle, Paris-Sud, Orsay. Jury : J.M. Bony, J. Bretagnolle, P. Deheuvels, D. Dacunha-Castelle, J.R. Leon, J.P. Raoult. Second Thesis : Sytèmes hyperboliques de conservation de lois multidimensionnelles, with J.M. Bony

1987 Promotion C.R.1

1988-1989 Professor at Wuhan University,China

1993 Professor at Cergy-Pontoise University

1999 Promotion Pr.1 (first class professor CNU)

2002 Professor at ENSAE

9/2008 Professor at Cergy-Pontoise University (Prime PEDR)

9/2009 Promotion Pr.Ex (Exceptional class professor CNU).

11/2010 Prime of scientific excellence (10Keuros)

9/2011 Nomination as a Senior member of IUF

C. Teaching, research and administration of research

1986-1992 Responsable of an agreement Caracas-Orsay.

1998- 2002 Member of the Scientific committee at Cergy.

1999-2002 Member of the bureau of the Scientific committee at Cergy.

2001- Vice president of the recruiting committee Math-Info Paris 2-ASSAS commission.

2006 Associate editor, **Stochastic Processes and their Applications**.

2009 Selection committee, university Cergy-Pontoise

2009, 2010 Selection committee, university Rennes.

2009 Agreement of cooperation with Polytechnic Institute Kiev.

2010 Selection committee, university Toulouse 3.

2010 Associate editor, **Statistics**.

2010 Associate editor, **Strapro**.

2010 Direction of the master of applied Mathematics, Cergy.

2010 Participation to the Labex project Math-Eco Cergy.

2012 Organisation of the thematic Cycle: Nonstationarity and risk management, in Cergy-Pontoise with Jean Luc Prigent and Flora Koukiou

C1. PhD Students

1990-1993 **Philippe SOULIER**, *Quelques problèmes d'estimation fonctionnelle dans différents cadres de dépendance. First Class Professor Univ. Paris 10.*

1991-1994 **Patrick ANGO NZE**, *Estimation non paramétrique en situation mélangeante*. *Mcf. Lille.*

1993-1996 **Ricardo RIOS**, *Tests d'hypothèses qualitatives et estimations de fonctions ou de leurs dérivées en situation de dépendance faible. Professor University Central of Venezuela, Caracas.*

1993-1996 **Caren LUDENA**, *Estimation Minimax des fonctionnelles d'une densité spectrale (codirection J. R. Léon, Caracas). Professor University Central of Venezuela, Caracas.*

1995-1997 **Samir BENHARIZ**, *Dépendance forte et applications statistiques.MCf University le Mans.*

1995-1998 **Sana LOUHICHI**, *Dépendance faible et positive; propriétés et applications statistiques. Professor University Grenoble.*

1998-1999 **Ali KHEZOUR**, *Dépendance forte et théorèmes limite*. *Computer engineer.*

1998-2002 **Clémentine PRIEUR**, *Dépendance faible et systèmes dynamique; applications statistiques. Professor University Grenoble.*

2002- **Nicolas RAGACHE**, *Propriétés asymptotiques des sondages et dépendance*. *Cabinet of a minister.*

2004-2007 **Olivier WINTENBERGER**, *Dépendance faible en statistiques (with J.M Bardet) MCf University Paris 9.*

2004-2006 **Gilles TEYSSIERE**, *Dépendance forte et utilisation en Finances et en statistiques*. *Habilitation*, *Aarhrus*

2004-2006 **Stéphanie DUPOIRON,** *Sous échantillonnage en dépendance faible*. *Paris Oper.*

2006-2008 **Lionel TRUQUET**, *Processus et des champs aléatoires faiblement dépendants, MCf*

Rennes.

2006-2010 **Nathanael MAYO**, *Maîtrise du risque d'exécution sur les marchés financiers : Estimation de matrices de corrélations,Cifre contract Exane-BNP-Paribas-University Paris 1 CALYON.*

2009- **Cai Sixiang**. *Bootstraping extreme statistics for financial applications. Codirection with J. L. Prigent and Olivier Wintenberger. Thesis Cergy UCP.*

2010- **Li Xiaoyin.** *Global warming. Non stationarity of times series and space-time processes. Thesis Cergy UCP.*

C2. Applied problems

1981 Validation by simulations of kernel regression estimates.
1986-1988 Work with N. Pican on reliability, IFREMER, Brest.
1987-1989 Analysis of import-export data, GEC ALSTHOM, Paris, with F. Guénard.
1988 Eartquakes in Venezuela with Leon and Nicolle.
1992-1996 Co-responsable with G. Oppenheim: contract Orsay-EDF, prediction of consumption.
2006 Contract CIFRE EXANE BNP-Paribas with SAMOS Paris 1.
2007 Prediction of consumption and change-points in electric consumption, EDF.
2010 Prevision, workshop organized with Matthieu Cornec, INSEE.

C3. Organization of conferences

I was member of the scientific committee of a very large number of international conferences

11/1998 Coorganization of « Long range dependence », Journées Franco-Belges de statistiques, Luminy, France.

6/2005 Organisation of a conference on **dependence and applications** in Paris with Patrice Bertail.

5/2009 Organization of an invited session SFDS Bordeaux.

1/2010 Organization of a conference on times series, Cergy.

6/2010 Co-organization with J. M. Bardet, G. Lang, F. Merlevede of a conference dedicated to the 60th birthday of Magda Peligrad, Paris.

4/2011 Co-organization of a Workshop at CIRM, Marseille on limit theorems for dependent data, with Richard Bradley, Herold Dehling, Michael Neumann.

6/2011 Co-organization with K. Fokianos of a conference on times series, Cyprus.

11/2011 Conference on nonstationnarity, Cergy Pontoise (organized with EDF)

2012 Organization of a thematic Cycle at Cergy Pontoise **Nonstationarity and Risks** with Jean Luc Prigent and Flora Koukiou.
Duration one year, budget 50 000euros and 6 months of invited professors)

C4. Invitations

Only very few national or Venezuelan conferences and invitations are mentioned.

05/1992 Valladolid, Spain.

02/1993 Curve Estimation and Massive Computation, Oberwolfach, Allemagne.

09/1994 Workshop on mixing, Montevideo, Uruguay.

08/1995 Limit theorems for dependent random variables, Chairman, Aahrus Conference.

04/1996 Calcul Stochastique, Ascona.

03/1997 Mathematische Stochastik, Oberwolfach, Deutschland.

03/1998 Workshop on times series analysis, CRM, Montréal, Canada.

09/1998	Systèmes dynamiques aléatoires en temps long, Journées MAS, Sophia Antipolis.
1/1999	Conference ETH Zurich.
2/1999	Conference LSE London.
5/2001	Conference SDS-Nantes. Invited speaker.
6/2002	8th conference in Vilnius on probability and mathematical statistics.
7/2002	Conference Gnedenko in Kiev..
9/2002	Universidad Central de Vénézuéla, Caracas.
7/2003	Conference for 100th birthday of Kolmogorov, Moscow..
9/2003	Workshop on CLT, in Prague, organized by P. Lachout. .
1/2004	Institut Steklov, Saint Peterburg, work with M. Lifshitz..
3/2004	IX-th CLAPEM, Punta del Este Uruguay.
5/2004	Conference on times series in Graz, Austria, organized by I Berkes, L Horvath.
9/2004	Merida Vénézuéla: latino american school of mathematics : weak dependence.
1/2006	University de Moscow, work with A. Bulinskii.
6/2006	Gnedenko Conference, Kiev.
7/2006	XXVI European Meeting of Statisticians, Torun (invited session).
9/2006	Journées MAS de la SMAI, Modèles Spatiaux, Lille (organisation of a session).
12/2006	Course on times series, La Habana, Cuba.
2/2007	X-th CLAPEM Lima.
5/2007	Conference on times series in Graz, Austria, organized by I Berkes, L Horvath.
7/2007	Caracas, Vénézuéla .
10/2007	Polytechnic Institute Kiev, course on weak dependence.
3/2008	GOPS, Aachen (special invited lecture)
6/2008	RATS 2008, Protaras, Cyprus.
6/2008	IAS Workshop, Munich
2/2009	ETHZ Zurich (3 weeks at the Laboratory of Finance)
2/2009	Conference at Neuchatel.
3/2009	Conference at Zurich University
5/2009	RoGerS, Sibiu, Romania (special invited lecture).
5/2009	Conference on times series, Debrecen, Hungary.
5/2009	Polytechnic Institute Kiev, lectures on times series and agreement KPI.
5/2009	Conference in the honour of Walter Philipp, Graz, Austria.
6/2009	Conference in Grenoble.
8/2009	Conference at Zurich University
9/2009	WIN09, statistics for integer valued times series, Porto, Portugal.
10/2009	ERCIM09, econometry of times series, Limassol, Cyprus.
12/2009	Seminar Weierstrass Institute, Berlin.
12/2009	Conference in SPAAF Lyon.
8/2010	28th-European Meeting of Statistics, Piraeus, Greece.
9/2010	Prague Stochastics, Prague.
9/2010	Modern Stochastics, theory and applications II, Kiev, Ukraine.
6/2011	Second Conference on integer valued times series, Cyprus.
9/2011	Number Theory and probability, theory and applications II, Kiev, Ukraine.
11/2011	Conference on nonstationnarity, Cergy Pontoise.
11/2011	Conference for the 60th Birthday of Jose Leon (main lecture).
12/2011	Lectures on weak dependence, Louvain la Neuve

D. Academics

D1. Teaching

1980-1981 Internship in highschools, Versailles.

1980-1986 Preparation to the competition for highschool professors: Analysis, ENS St-Cloud.

1988-1989 Direction of the program of applied mathematics: Wuhan, China.

1990-1992 PhD course M.A.S.E. University Paris 9: Stochastic Calculus.

1992-1993 PhD course, Bordeaux 1 University Functional Estimation.

1993 Preparation to CAPES competition, University Paris 13: Probability.

1993-2002 Direction of undergraduate courses (mathematics applied to economy) Cergy Pontoise University; courses of calculus and probability.

1993-1996 PhD course, Orsay, Dependence and mixing.

1994-1997 Graduate course, probability at Cergy Pontoise University.

2002 Graduate course: Introduction to inference and tests, ENSAE, 2nd year.

2002 Graduate course: Using empirical processes in statistics, ENSAE, 3rd year.

2008 Direction of undergraduate courses (mathematics applied to economy) Cergy Pontoise University; Lectures in Licence Cergy

2009 Master LSTA, Paris 6 M2, lectures on dependence on non linear times series.

2009- Master GRFA Cergy (lectures on mathematical background of finance M2)

2010- Master Mathematics Cergy, course of Statistics M1

2010 Master of Mathematics Cergy, courses for Agregation preparation.

2010- Direction of MAM (Master of Applied Mathematics Cergy).

2010-2011 Lectures on times series, M1, MAM Cergy.

2010- Lectures on non linear times series, M2, MAM Cergy.

2010- Lectures on stochastic processes, M2, MAM Cergy.

D2. Teaching publications (in french)

Corrigés de concours d'entrée aux grandes écoles scientifiques (Séries M' et P'), M. Dourakine, collectif. D.I.A., Editions Belin 1978.

Problèmes corrigés Baccalauréat (Série D) M. Dourakine, collectif. D.I.A., Editions Belin, 1978.

Analyse réelle. Préparation à l'agrégation: ENS Saint-Cloud (60 pages), 1980.

Théorie de l'Approximation. Préparation à l'agrégation: ENS Saint-Cloud (20 pages), 1982.

Calcul Stochastique élémentaire. Cours de troisième cycle, Université Paris 9, Dauphine (100 pages), 1985.

Estimation Fonctionnelle. Cours de troisième cycle, Université Bordeaux 2 (120 pages), 1987.

Cours de mathématiques. Premier cycle MASS. Université de Cergy Pontoise. (160 pages), 1994.

Course of mathematical analysis with Jean Claude Sifre (2002, see reference [3]).

Course of Statistics at ENSAE (2002) 95 pages.

A course on empirical processes (2003) 55 pages

A course on time series (2003) 62 pages.

Estimation 2, ENSAE (2006) 87 pages

Real Analysis, 1rst Term of the Licence Eco-Math, 85 pages

Statistics, Cergy, M1 (2009) 87 pages

Non linear times series, Paris 6, M2 (2009) 120 pages

Mathematical tools for finance, Cergy, M2 (2009) 125 pages

E. Publications

E.1 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) Birkhaüser, 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 (Editors) LNS 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. Prieur, S. Louhichi, J. Dedecker, J. R. Leon (2007).

[6] Dependence in Statistics and Econometry, Gabriel Lang, Paul Doukhan, Donatas Surgailis and Gilles Teyssière (Editors) , LNS 200, Springer New York (2010).

E2. Papers

[1] with M. Ghindes. Etude du processus $X_{n+1}= f(X_n) + e_{nn+1}$. C.R.A.S. Série A, 290-19, 921-923 (1980).

[2] with M. Ghindes. Estimations dans le processus $X_{n+1}= f(X_n) + e_{n+1}$. C.R.A.S. Série A, 291-1, 61-64 (1980).

[3] with M. Ghindes. Estimation de la transition de probabilité d'une chaîne de Markov Doëblin récurrente . Étude du cas du processus autorégressif général d'ordre 1. [Estimation of the transition probability of a Doeblin-recurrent Markov chain. Study of the case of the general autoregressive process of order 1]. Stochastic Process. Appl. 15-3, 271-293 (1983).

[4] **Simulations in the general first order autoregressive process**. Specifying statistical models, Louvain 1982, LNS 16, Springer, 50-68, (1983).

[5] with F. Portal. Moments de variables aléatoires mélangeantes. [Moments of mixing random variables] C.R.A.S. Sér. I 297-2, 129-132 (1983)

[6] with G. Collomb. **Estimation non paramétrique de la fonction d'autorégression d'un processus stationnaire et f-mélangeant**. [Nonparametric estimation of the autoregression function of a stationary **f**-mixing process: quadratic risks of a kernel estimate] C.R.A.S. Série 1, 296-20, 859-863 (1983).

[7] with F. Portal, J.R. Leon. **Vitesse de convergence dans le théorème central limite pour des variables aléatoires mélangeantes à valeurs dans un espace de Hilbert**. C.R.A.S. Série 1 29-138, 305-308 (1984).

[8] with F. Portal, J. R. Leon. **Calcul de la vitesse de convergence dans le théorème central limite vis à vis des distances de Dudley, Lévy et Prokhorov**. Probab. Math. Stat. 6.1, 19-27 (1985).

[9] **Polynômes d'Hermite et statistique des processus mélangeants** [Hermite functions and statistics of mixing processes]. Bruxelles 1985. Review of C.E.R.O., Bruxelles 28:1-3, 99-115 (1986).

[10] with F. Portal, J. R. Leon. **Une mesure de la déviation quadratique d'estimateurs non paramétriques**. [A measure of the quadratic deviation of nonparametric estimators]. Ann. Inst.H.Poincaré.Probab. Statist. 22-1, 37-66 (1986).

[11] with J. R. Leon. **Invariance principles for the empirical measure of a mixing sequence and for the local time of a Markov process**. Geometrical and statistical aspects of probability in Banach spaces, Strasbourg 1985; L. N. M. 1993, 4-21, Springer (1986).

[12] with F. Portal. **Principe d'invariance faible pour la fonction de répartition empirique**

dans un cadre multidimensionnel et mélangeant. Probab. Math. Stat. 8.2, 117-132 (1987).
[13] with A. Bulinskii. Inégalités de mélange fort utilisant des normes d'Orlicz. C.R.A.S. Série 1 305-19, 827-830 (1987).
[14] with F. Portal, J. R. Leon. Principe d'invariance faible pour la mesure empirique d'une suite de variables aléatoires dépendantes. Probab. Th. Rel. Fields 76-1, 51-70 (1987).
[15] **Non parametric estimation of a regression function in a mixing framework.** Caracas, Acta Cient. Venez. 38, 5-6, 585-590 (1987).
[16] with J. R. Leon, J.L. Nicolle. **Metodologia para evaluar la sismicidad cuando la base de datos es incompleta**. Rev. Tec. I.N.T.E.V.E.P. 8.1, 13-22 (1988).
[17] **Formes de Toëplitz associées à une analyse multi-échelle**. C.R.A.S. Série 1 306-5, 663-666 (1988).
[18] with A. Bulinskii. **Vitesse dans le théorème de limite centrale pour des champs mélangeants satisfaisant des hypothèses de moments faibles**. C.R.A.S. Série 1 311-12, 801-805 (1990).
[19] with J. R. Leon. Cumulants for mixing sequences and applications to empirical spectral density. Probab. Math. Stat.10.1, 11-26 (1989).
[20] with J. R. Leon. Déviation quadratique d'estimateurs de densité par projections orthogonales [Quadratic deviation of projection density estimates]. **C.R.A.S. Sér. I Math 310-6,. 310,** 425-430 **(1990).**
[21] **Consistency of d-estimates for a regression or a density in a dependent framework** in Séminaire de Statistiques d'Orsay 1989-1990: Estimation Fonctionnelle. Preprint Orsay 91-55, 121-141 (1991).
[22] with E. Gassiat. Quadratic deviation of penalized mean square regression estimates. J. Mult. Anal. 41-1, 89-101 (1992).
[23] with J. R. Leon. Estimation du spectre d'un processus gaussien fortement dépendant [Spectral estimation for strongly dependent stationary Gaussian processes] C.R.A.S. Sér. I 313-8, 523-526 (1991).
[24] with X. Guyon. **Mélange pour des processus linéaires spatiaux**. C.R.A.S. Série 1 313-7, 465-470 (1991).
[25] with J. R. Leon. **Quadratic deviation of projection density estimates**. Re.Bra.P.E. 7-1, 37-63 (1993).
[26] with P. Ango Nze. Estimation fonctionnelle de séries temporelles mélangeantes [Functional estimation for mixing time series] C.R.A.S. Série 1 317-4, 405-408 (1993).
[27] with F. Gamboa. Vitesses de superrésolution en distance de Prokhorov |Superresolution rates in the Prokhorov metric] C.R.A.S. Série 1 318-12, 1143-1148 (1994).
[28] with P. Massart, E. Rio. **The functional central limit theorem for weakly dependent processes**.Ann. Inst.H.Poincaré Probab. Statist. 30-1, 63-82 (1994).
[29] 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).
[30] with P. Massart, E. Rio. **Invariance principle for the empirical measure of a weakly dependent process**. Ann. Inst.H.Poincaré Probab. Statist. 31-2, 393-427 (1995).
[31] with P. Ango Nze. Non parametric Minimax estimation in a weakly dependent framework I: Quadratic properties. Math. Methods Statist. 5-4, 404-423 (1996).
[32] with J. R. Leon and P. Soulier. **Empirical periodogramm of a long range dependent stationary Gaussian random fields**. Re. Bra. P. E., 10-2, 205-223 (1996).
[33] with F. Gamboa. Prohorov rates in super-resolution. Canad. J. of Math., 48-2, 316-329, (1996).
[34] with J. Leon. Asymptotics for the local time of a Gaussian random field.Acta Math. Hung. 70-4, 329-351 (1996).

[35] with P. Ango Nze. Functional estimation for time series: uniform convergence properties. J. Statist. Plann. Inference 68-1, 5-29 (1998).
[36] An overview on weak dependence conditions of stationary sequences. Acta Cient. Venez. 49-2, 78-93 (1998).
[37] 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).
[38] with S. Louhichi. A new weak dependence condition and applications to moment inequalities. Stochastic Process. Appl. 84-2, 313-342 (1999).
[39] with J. R. Leon, S. Ben Hariz. Central Limit Theorem for the local time of a Gaussian random process. Dalang, Robert C. *et al.* (ed.), Seminar on Stochastic analysis, random fields and applications. Centro Stefano Franscini, Ascona, Italy, September 1996. Basel: Birkhäuser. Prog. Probab. 45, 25-37 (1999).
[40] with C. Coulon-Prieur. A CLT for triangular arrays of weakly dependent sequences. Statist. Probab. Letters 47-1, 61-68 (2000).
[41] with S. Louhichi.Functional estimation for weakly dependent stationary time series. Scandinavian J. of Statistics 28-2, 325-342 (2001).
[42] with P. Ango Nze, P. Bühlmann. Weak dependence beyond mixing and asymptotics for non parametric regression. Ann. Statist. 30-2, 397-430 (2002).
[43] with P. Ango Nze. Weak dependence: models and applications, Dehling W. et al. (ed.), **Empirical Processes Techniques for Dependent Data**, 117--137 ***Birkhäuser Boston, Boston*** (2002).
[44] with G. Lang. Rates of convergence in the weak invariance principle for the empirical repartition process of weakly dependent sequences. Stat. Inference for Stoch. Process. 5, 199-228 (2002).
[45] with G. Lang, D. Surgailis. Functional CLTs for short or long memory linear sequences. En l'honneur de J. Bretagnolle, D. Dacunha-Castelle, I. Ibragimov. Ann. Inst.Henri Poincaré B. 38-6, 879-896 (2002).
[46] Models Inequalities and Limit Theorems for Stationary Sequences. **Theory and Applications of Long-range Dependence** **41**-100, ***Birkhäuser Boston, Boston*** (book [2]) (2003).
[47] with A. Khezour, G. Lang. Non-parametric estimation for LRD sequences. **Theory and Applications of Long-range Dependence** 303-311, ***Birkhäuser Boston, Boston*** (book [2]) (2003).
[48] with J. Dedecker. **A new covariance inequality and applications**. Stochastic Process. Appl. 106-1, 63-80 (2003).
[49] with O. Brandière. Algorithmes stochastiques à bruit dépendant. C.R.A.S. Série 1, 337-7, 473-476 (2003).
[50] with P. Ango Nze, **Weak dependence, models and applications to econometrics**. Econometric Theory 20-6, 995-1045 (2004).
[51] with J. Leon. **Asymptotics for Lp-deviation of a variance estimator under diffusion**. ESAIM P&S 8, 132-149 (2004).
[52] with O. Brandière. **Dependent noise for stochastic algorithms.** **Probab. Math. Statist.24-2 Acta Univ.. Wroclaw 2732,** 381--399 (2004).
[53] with G. Lang, D. Surgailis, M. C. Viano. **Functional limit theorem for the empirical process shifts with long memory**. J. Theor. Probab. 18-1, 161--186 (2005)
[54] with B. Ycart, Y. Coupier. **0-1 laws for dependent images**, Alea Lat. Am. J. Probab. Statist 2, 15-175 (2006).
[55] with A. Latour and D. Oraichi. Simple integer-valued bilinear time series model. Advances in Applied Probability 3-28, 559--578 (2006).
[55] with G. Teyssière, P. Winant. **Vector valued ARCH infinity processes**, in Dependence in Probability and Statistics LNS 187 Springer (book [4]) (2006).
[56] with H. Madré, M. Rosenbaum. **ARCH type bilinear weakly dependent models**, Statistics 41-1, 31-45 (2007).
[57] with M. Neumann. **A Bernstein type inequality for times series**, Stochastic Process Appl.

117-7, 878-903 (2007).
[58] with O. Wintenberger. **A central limit theorem under non causal weak dependence and sharp moment assumptions**, Prob. Math. Stat. 27, 45-73. (2007).
[59] 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).
[60] 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).
[61] with J. M. Bardet and J. R. Leon. **A functional limit theorem for weakly dependent processes and its applications**. Stat. Inference Stoch. Process 11-3, 265--280.(2008).
[62] with J. M. Bardet, J. R. Leon. **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).
[63] with G. Lang, S. Louhichi, B. Ycart. A functional central limit theorem for interacting particle systems on transitive graphs. Markov Processes Relat. Fields 14-1, 79-114 (2008)..
[64] with L. Truquet. **A fixed point approach to model random fields**. Alea Lat. Am. J. Probab. Statist.2, 111-132 (2007).
[65] with O. Wintenberger. **Weakly dependent chains with infinite memory**, Stochastic Process Appl. 118, 1997-2013 (2008).
[66] with J. D. Fermanian, G. Lang. **Copula of a stationary vector valued weakly dependent process**, **Stat. Inference Stoch. Process. 12-1,** 65-87. (2009).
[67] with M. Neumann. **The notion of weak dependence and its applications to bootstrapping time series**, Probab. Surveys 5, 146-168 (2008).
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E3. In preparation

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