

Publications des membres du LMAM 2006, 2007, 2008

(Mise à jour le 27 janvier 2009)

Publications du LMAM 2006

(A) **ACL 2006:** Articles dans des revues internationales ou nationales avec comité de lecture répertoriées dans les bases de données internationales (2006)

Ion Grama

A1) Dupuy J.-F., Grama I. and Mesbah M. Asymptotic theory for the Cox model with missing time-dependent covariate. *Annals of Statistics*, 2006, Vol. 34, No. 2, 903-924.

A2) Grama I. and Haeusler E. An asymptotic expansion of moderate deviations for multivariate martingales. *Journal of Theoretical Probability*, 2006, Vol. 19, No. 1, 1-44. DOI 10.1007/s10959-006-0001-x

A3) Grama I. and Neumann M. Asymptotic equivalence of nonparametric autoregression and nonparametric regression. *Annals of Statistics*. 2006, Vol. 34, No. 4, 1701-1732.

Quansheng Liu

A4) Quansheng Liu. On a linear recursive distributional equation. J. Changsha University of Science and Technology. vol.3, no.3, 2006, 91-97.

Frédéric Mathéus

A5) F.Mathéus, J.Mairesse, Growth series for Artin groups of dihedral type, Int. J. of Algebra and Comput. Vol. 16, No. 6 (2006), 1087-1107.

Bertrand Patureau – Mirand

A6) Bertrand Patureau – Mirand, *Quantum Link Invariant from the Lie Superalgebras $D(2|1, \alpha)$* , Algebraic & Geometric Topology 6 (2006) 329-349. (math.GT/0404548).

Pierre Pellat –Finet, Eric Fogret, Pierre Emmanuel Durand

A7) P. Pellat-Finet, E. Fogret, Opt. Comm., 258 (2006) 103--113, Complex order fractional Fourier transforms and their use in diffraction theory. Application to optical resonators.

A8) P. Pellat-Finet, P.-E. Durand, Comptes Rendus Physique, 7 (2006) 457-463. La notion de spectre angulaire sphérique.

A9) R. Torres, P. Pellat-Finet, Y. Torres, IEEE Signal Processing Letters 13 (2006) 676--679, Sampling theorem for fractional bandlimited signals: a self-contained proof. Application to digital holography.

A10) P. Pellat-Finet, P.-E. Durand, E. Fogret, Optics Letters, 31 (2006) 3429--3431, Spherical angular spectrum and the fractional order Fourier transform

Zhiqiang Gao

A11) Gao, Zhiqiang; Deng, Guantie. On completeness and minimality of random exponential system in a weighted Banach space of functions continuous on the real line. Chinese Ann. Math. Ser. B 27 (2006), no. 3, 303--310.

Béatrice Vedel

A12) Vedel, Béatrice Confinement of the infrared divergence for the Mumford process. Appl. Comput. Harmon. Anal. 21 (2006), no. 3, 305-323.

B) ACT 2006: Communications avec actes dans un congrès international ou national (2006)

Ion Grama

B1) Grama, I. An extension of the Tusnady inequality for general distributions. *Communications of The 14th Conference on Applied and Industrial Mathematics. Satellite Conference of ICM 2006*. Chisinau, August 17-19, 2006, p. 184-188. ISBN 978-9975-9690-1-7.

Quansheng Liu, Feng Xue

B2) Feng Xue, Quansheng Liu and Wei-hong Fan. Iterative Image Restoration using a Non-Local Regularization Function and a Local Regularization Operator. The 18th International Conference on Pattern Recognition (ICPR 2006), Vol 3, 766-769. IEEE 20-24 August 2006.

Pierre-François Petiot

B3) Pierre –François Petiot, L'usage des moyens audiovisuels dans l'enseignement supérieur. Acte du colloque international « l'Université à l'ère du numérique », 22-24 mai 2006, Paris. <http://www.educnet.education.fr/chrgt/Actes-CIUEN-06.pdf>

C) Brevet 2006

Pierre Pellat-Finet

C1) Déposé le 2 NOV 2006 à 44 INPI Nantes sous le numéro 06/09579. Titres : Dispositif de focalisation d'un faisceau laser.
Inventeurs : Maxime Tournel, Pierre Pellat-Finet

Publications du LMAM 2007

(A) **ACL 2007**: Articles dans des revues internationales ou nationales avec comité de lecture répertoriées dans les bases de données internationales (2007)

Sylvain Barré :

A1) S.Barré, Real and discrete holomorphy : introduction to an algebraic approach. J. Math. Pures Appl. 87 (2007) 495-513.

A2) S. Barré, Sur les immeubles triangulaires et leurs automorphismes, Geometriae Dedicata (2007) 130 : 71-91

Eric Fogret, Pierre Pellat-Finet :

A3) E. Fogret, P. Pellat-Finet, *Opt. Comm.*, 272 (2007) 281--288, Agreement of fractional Fourier optics with the Huygens-Fresnel principle.

Ion Grama

A4) Grama I. and Spokoyny V. Pareto approximation of the tail by local exponential modeling. *Bulletin of the Academy of Sciences of Republic of Moldova*. 2007, Vol. 53, No. 1, 1-22.

Quansheng Liu

A5) Yingqiu Li, Xu Li and Quansheng Liu. A random walk with a branching system in random environments. *Sci. China, Series A: mathematics*. vol. 50, no. 5, 2007, 698-704.

Frédéric Mathéus:

A6) F.Mathéus, J.Mairesse, Randomly growing braid on three strands and the Manta ray. *Ann. Appl. Probab.* Vol. 17, No. 2 (2007), 502-536.

A7) F.Mathéus, J.Mairesse, Random walks on free products of cyclic groups. *J. London Math. Soc.* (2) 75 (2007), 47-66.

Bertrand Patureau – Mirand

A8) Bertrand Patureau – Mirand, Nathan Geer : Multivariable link invariants arising from $sl(2|1)$ and the Alexander polynomial, *J. Pure Appl. Algebra* 210 (2007), no. 1, 283--298.

Béatrice Vedel

A9) Vedel, Béatrice, Besov characteristic of a distribution. *Rev. Mat. Complut.* 20 (2007), no. 2, 407--421.

B) ACT 2007: Communications avec actes dans un congrès international ou national (2007)

Jacques Froment, Quansheng Liu, Feng Xue

B1) Feng Xue, Quansheng Liu, Jacques Froment, "An a Contrario Approach for Parameters Estimation of a Motion-Blurred Image". *Proc of EMMCVPR 2007, Energy Minimization Methods in Computer Vision and Pattern Recognition*, August 27-29, 2007, EZhou, Hubei, China. In *Lecture Notes in Computer Science Volume 4679 / 2007*, pages 267-279.

Quansheng Liu

B2) Quansheng Liu: Branching Random Walks in Random Environment. *Proceedings of the 4th International Congress of Chinese Mathematicians, 2007 (ICCM 2007)*, Vol. II, 702-719. Eds: L. Ji, K. Liu, L. Yang, S.-T. Yau. (Conférence invitée, 45mn)

Pierre Pellat-Finet

B3) D. S. Tasca, M. P. Almeida, S. P. Walborn, P. H. Souto Ribeiro, C. H. Monken, P. Pellat-Finet, 9th Conference on Coherence Quantum optics (CQO--9) Washington (2007), Violation of Bell inequality with the fractional momentum of the photon: a step toward a new q-bit.

C) OS 2007: Ouvrages scientifiques (ou chapitres de ces ouvrages) 2007

Olga Zeydina

C1) Bernard Beauzamy, Olga Zeydina. Méthodes probabilistes pour la reconstruction de données manquantes : manuel théorique et pratique. Société de calcul mathématique, 2007

Publications du LMAM 2008

A) ACL 2008: Articles dans des revues internationales ou nationales avec comité de lecture répertoriées dans les bases de données internationales (2008)

Sylvain Barré

A1) Barré S., Pichot M., Existence d'immeubles triangulaires quasi-périodiques, à paraître dans Mathematische Annalen.

Ion Grama

A2) Grama I. and Spokoiny V. Statistics of extremes by oracle estimation. (2008). Annals of Statistics. Volume 36, Number 4 (2008), 1619-1648.

Emile Le Page

A3) Yves Guivarc'h and Emile Le Page, on spectral properties of a family of transfer operators and convergence to stable laws for affine random walks, Ergodic theory and Dynamical Systems (2008) 28,423-446.

Quansheng Liu

A4) Yingqiu Li and Quansheng Liu. Age-dependent branching processes in random environments. Sci. China, Series A: mathematics. 51, no.10, 1807-1830, 2008.

A5) Xiaojun Luo, Bing Li, Quansheng Liu and Jiawei Xu. A new linear mixed filter. Computer engineering and applications (ISSN : 1002-8331), vol. 44, no.17, pp.172-174 and 190, 2008.

Bertrand Patureau – Mirand

A6) Bertrand Patureau – Mirand, Nathan Geer: On the Colored HOMFLY-PT, Multivariable and Kashaev link Invariants. à paraître dans Communications in Contemporary Mathematics (acceptée).

A7) Bertrand Patureau – Mirand, Nathan Geer : An invariant supertrace for the category of representations of Lie superalgebras. à paraître dans Pacific Journal of Mathematics (acceptée).

A8) Bertrand Patureau – Mirand, Nathan Geer et Vladimir Turaev: Modified quantum dimensions and re-normalized link invariants. à paraître dans Compositio Mathematica (acceptée).

P. Pellat-Finet

A9) D.S. Tasca, S. P. Walborn, P. H. Souto Ribeiro, F. Toscano, P. Pellat-Finet, Propagation of transverse intensity correlations of a two-photon state. Physical Review A, à paraître

Béatrice Vedel

A10) B. Vedel, Flat wavelet bases adapted to the homogeneous Sobolev spaces (accepté, to appear in 2009) *Mathematische Nachrichten*, Volume 282 Issue 1, pages 104-124 (2009)

A11) B. Vedel, Wavelet bases for convergence of the infrared divergence (Accepté, à paraître en 2009) *Journal of Fourier Analysis and Applications*.

A12) Herwig Wendt, Patrice Abry, Stéphane G. Roux, Stéphane Jafard, Béatrice Vedel, Analyse multifractale d'image : l'apport des coefficients dominants, *Traitement du Signal*, 2009. To appear.

Zhiqiang Gao

A13) Gao, Zhiqiang; Deng, Guantie On weighted approximation by lacunary polynomials on the rays emerging from the origin. *Studia Sci. Math. Hungar.* 45 (2008), no. 2, 197--205.

A14) Gao, Zhiqiang; Deng, Guantie Müntz-type theorem on the segments emerging from the origin. *J. Approx. Theory* 151 (2008), no. 2, 181--185.

Qiyu Jin

A15) Qiyu Jin, Daochun Sun. The (p,q) Ritt order and lower order of Dirichlet series in the half plane. *J. Sys. Sci. & Math. Scis.* 28 (12) (2008,12), 1492-1501.

A16) Qiyu Jin, Daochun Sun. On the Distribution of Random Dirichlet Series in the Whole Plane. To appear in *Acta Mathematica Scientia*, 2009.

B) ACT 2008: Communications avec actes dans un congrès international ou national 2008

Ion Grama

B1) Nazin, A.V., Roll, J., Ljung, L. and Grama, I. Direct weight optimization in statistical estimation and system identification. Plenary report at the international conference SICPRO'08 (System Identification and Control Problems), Moscow, January 28-31, 2008. V.A. Trapeznikov Institute of Control Sciences.

http://www.sicpro.org/sicpro08/code/e08_01.htm; Published in the Proceedings of the VII International Conference "System Identification and Control Problems" SICPRO'08 Moscow. 40 pp. (Conférence invitée)

Pierre Pellat-Finet

B2) R. Torres, P. Pellat-Finet, Y. Torres, Congrès RIAO/OPTILAS 2007 (Campinas, Brésil), AIP Conference Proceedings, **992** (2008) 168--173, Fractional Shifting and sampling in the fractional domain. Application to digital holography.

B3) P. Pellat-Finet, Z. Lizarazo, R. Torres, Congrès RIAO/OPTILAS 2007 (Campinas, Brésil), AIP Conference Proceedings, **992** (2008) 1129--1134, On the analogy between Fresnel diffraction and dispersion in transmission lines and some of its applications.

B4) E. Bialic, M. Kessels, I. Hardy, P. Grosso, K. Heggarty, R. Torres, P. Pellat-Finet, Phototraceur UV a DMB pour la réalisation de fonctions optiques intégrées et diffractives, Journées nationales d'optique guidée (JNOG), Lannion, Novembre 2008.

B5) P. Pellat-Finet, Un panorama de la optica de Fourier fraccionaria. Resultados recientes y aplicaciones, 11e Encuentro Nacional de optica et 2e Conference ANdine et Caraïbe en Optique et Applications. Pamplona, Colombie, Novembre 2008. (Conférence invitée)

Béatrice Vedel

B6) Patrice Abry, Stéphane Jaffard, Stéphane G. Roux, Béatrice Vedel, Herwig Wendt, Wavelet decomposition of measures: Application to multifractal analysis of images, in *Unexploded Ordnance Detection and Mitigation : Proceedings of the NATO Advanced Study Institute on Unexploded Ordnance Detection and Mitigation*, J. Byrnes, Ed., pp. 1-20, Springer, 2009.

B7) Stéphane Jaffard, Patrice Abry, Stéphane G. Roux, Béatrice Vedel, Herwig Wendt, The contribution of wavelets in multifractal analysis, in *Series in contemporary applied mathematics*, A. Damlamian, S. Jaffard, L.T. Tsien, Eds., Higher education press and World scientific publishing, 2009. To appear.

Farida Said

B8) A. Achour, J. Villaneau, D. Duhaut, F. Said. "Cognitive and Emotional Linguistic Interaction." In *Child, Computer and Interaction (ICMI'08 post-conference workshop)*, Chania, Crete, Greece, October 2008.

C) OS 2008: Ouvrages scientifiques (ou chapitres de ces ouvrages) 2008

Pierre Pellat-Finet, Eric Fogret

C1) P. Pellat-Finet, A. Patino, R. Torres, *Del analisis armonico a la optica de Fourier*, 107 pp., Ediciones Universidad de Pamplona (Colombie), 2008. (Un Livre)

C2) P. Pellat-Finet, E. Fogret, Fractional Fourier optics theory of optical resonators, A paraître (Un chapitre)