Publications and Communications

Papers

[1] Guyon X. and Perrin 0. (2000). Identification of space deformation using linear and superficial quadratic variations. *Statistics & Probability Letters*, **47**, 307-316.

[2] Perrin O. (1999). Quadratic variation for Gaussian processes and application to time deformation. *Stochastic Processes and their Applications*, **82**, 293-305.

[3] Perrin O. and Meiring W. (1999). Identifiability for non-stationary spatial structure. *Journal of Applied Probability*, **36** (4), 1244-1250.

[4] Perrin O. and Monestiez P. (1998). Modelling of non-stationary spatial structure using parametric radial basis deformations, *geoENV II - Geostatistics for Environmental Applications*, Editors : J. Gómez-Hernández, A. Soares and R. Froidevaux, volume **10** in the serie Quantitative Geology and Geostatistics, Kluwer Academic Publishers, 175-186.

[5] Perrin O. and Senoussi R. (1999). Reducing non-stationary stochastic processes to stationarity by a time deformation. *Statistics & Probability Letters*, **43**, 393-397.

[6] Perrin O. and Senoussi R. (2000). Reducing non-stationary random fields to stationarity and isotropy using a space deformation. *Statistics & Probability Letters*, **48**, 23-32.

Working papers

[7] Guérin C.A., Nyberg H., Perrin O., Resnick S., Rootzén H. and Stărică C. (2001). Data testing the infinite source Poisson communication model. Submitted to *Stochastic Models*, and *Cahier du GREMAQ numéro 20.04.535*, 42 pages.

[8] Iovleff S. and Perrin O. (2000). Estimating a non-stationary spatial structure using simulated annealing. Revised by *Journal of Computational and Graphical Statistics*, 14 pages.

[9] Perrin O. and Rootzén H. (2001). Estimation of extreme windspeeds in Sweden, 22 pages.

Other material (in French)

[10] Perrin O. (1997). *Modeling covariance of a non-stationary process by space deformation and statistics.* Ph. D. thesis in Applied Mathematics, University of Paris I Panthéon-Sorbonne.

[11] Perrin O. (1993). *Analyse statistique du retour d'expérience de 1178 adaptateurs affectés par la corrosion sous contrainte en milieu primaire.* DEA Master Thesis, EDF, Research Department.

[12] Perrin O. (1991). *Mise en évidence des paramètres ayant pu influencer l'évolution de carrière d'une catégorie de personnel.* ENSAE Bachelor Thesis, Rhône-Poulenc, Human Resources Department.

Communications at conferences and workshops

[13] Perrin O. Model of non-stationary Gaussian processes by space deformation, 21^{st} Research Students' Conference in Probability and Statistics, Lancaster, UK, 31 March-2 April 1998.

[14] Iovleff S. and Perrin O. Estimation of the covariance model of a non-stationary random field by deformation of the space by simulated annealing, 2^{nd} Workshop on Spatial Statistics and Image Analysis in Biology, Sandbjerg, Denmark, 17-20 May 1998.

[15] Perrin O. and Senoussi R. Reducible Covariance Functions, 2^{nd} Workshop on Spatial Statistics and Image Analysis in Biology, Sandbjerg, Denmark, 17-20 May 1998.

[16] Iovleff S. and Perrin O. Estimation d'un modèle de covariance d'un champ aléatoire non-stationnaire par déformation de l'espace à l'aide d'un algorithme de type recuit simulé, $XXX^{èmes}$ *Journées de Statistiques*, Rennes, France, 25-29 May 1998.

[17] Perrin O. and Senoussi R. Reducible Covariance Functions, *Prague Stochastics'98* : 6^{th} Prague Symposium on Asymptotic Statistics and 13^{th} Prague Conference on Information Theory, Statistical Decision Functions and Random Processes, Prague, Czech Republic, 23-28 August 1998.

[18] Perrin O. and Monestiez P. Modelling of non-stationary spatial covariance structure by parametric radial basis deformations, *geoENV98* : Second Conference on Geostatistics for Environmental Applications, Valencia, Spain, 18-20 November 1998.

[19] Guyon X. and Perrin O. Identification de déformations spatiales par variations quadratiques linéaires et superficielles, $XXXI^{èmes}$ *Journées de Statistiques*, Grenoble, France, 17-21 mai 1999.

[20] Aragon Y., Goulard E., Malin E., Perrin O. and Thomas C. Estimation d'une matrice de contiguïté et test dans un modèle de dépendance spatiale. Application à l'offre de soins dans la région Midi-Pyrénées, $XXXIII^{èmes}$ *Journées de Statistiques*, Nantes, France, 14-18 mai 2001.

Invited communications at seminars

[21] Perrin O. Modeling and estimating a non-stationary spatial structure using a space deformation. One week at Laboratory for Computational Stochastics, Department of Mathematical Sciences, University of Aarhus, Denmark, 8-12 February 1999.

[22] Perrin O. Different methods for estimating the correlation function of a non-stationary random field. Department of Mathematics, Aalborg University, Denmark, 18 February 1999.

Communications at seminars

[23] Perrin O. Modélisation de la covariance d'un processus non-stationnaire par transformation de l'espace. LABSAD, University Pierre Mendès-France, Grenoble, France, 18 March 1997.

[24] Perrin O. Covariance modeling of non stationary processes by space deformation: statistical issues. Mathematical Statistics, Chalmers University of Technology and Göteborg University, Göteborg, Sweden, 18 August 1997.

[25] Perrin O. Statistiques spatiales non-stationnaires pour l'environnement. Unité BIA, INRA, Toulouse, France, 12 December 1997.

[26] Perrin O. Modèle de covariance d'un processus non-stationnaire par déformation de l'espace. ENSA-INRA, Montpellier, France, 5 January 1998.

[27] Senoussi R. and Perrin O. Homogénéisation de champs aléatoires par déformation de l'espace. Sabres, Vannes, France, 18 December 1998.