

ASMDA 2005

Conference Schedule

MONDAY, MAY 16, 2005

17:00 - 20:00 [Hall]

Registration Desk open

TUESDAY, MAY 17, 2005

8:00 - 9:00 [Hall]

Registration and Coffee

9:00 - 9:30 [Mérienne]

Opening Session (Chair: J.-P. Barthélemy, N. Limnios, G. Saporta, France)

9:30 - 10:30 [Mérienne]

Plenary session I (Chair: N. Limnios)

Brownian movement in gamma fields. Erhan Cinlar (Princeton University, USA)

10:30 - 11:00 **Coffee Break**

11:00 - 13:00 [Mérienne]

Invited session DA 1 – Modelling functional data in practice (Organizer/Chair: M.-J. Valderrama, Spain)

A solution to the discrete-time linear prediction problem using PCA. R. Fernández-Alcalá, J. Navarro-Moreno and J. C. Ruiz-Molina

Total least squares for functional data. C. Crambes

Forecasting binary longitudinal data by a functional PC-ARIMA model. A. M. Aguilera, M. Escabias and M. J. Valderrama

11:00 - 13:00 [room 1]

Invited session MP 1 – Semi-Markov Processes: Estimation and Control (Organizer/Chair: N. Limnios, France)

On the time-average optimality for semi-Markov control processes with Feller transition probabilities. A. Jaskiewicz and A. S. Nowak

Nonparametric Estimation for Semi-Markov Processes Based on K-Sample Paths with Application to Reliability. N. Limnios and B. Ouhbi

Maximum Likelihood Estimation for Hidden Semi-Markov Models. V. Barbu

Centered Semi-Markov Random Walk in Diffusion Approximation Scheme. V. S. Koroliuk and N. Limnios

11:00 - 13:00 [room 2]

Invited session KMDM 1 – *Quality in data mining* (Organizers/Chair: F. Guillet, France and Ph. Lenca, France)

Assessing rule interestingness with a probabilistic measure of deviation from equilibrium. J. Blanchard, F. Guillet, H. Briand and R. Gras

Application de l'analyse statistique implicative à l'amélioration terminologique de bilans comportementaux. J. David, F. Guillet, V. Philippé, and R. Gras

Preference Learning in Terminology Extraction: A ROC-based approach. J. Azé, M. Roche, Y. Kordatoff and M. Sebag

Parametrised measures for the evaluation of association rule interestingness. S. Lallich, B. Vaillant and Ph. Lenca

11:00 - 13:00 [room 3]

Invited session CLU 1 – *Validation in unsupervised classification* (Organizer/Chair: A. Hardy, Belgium)

Validation in unsupervised symbolic classification. A. Hardy

Attribute Selection for High Dimensional Data Clustering. L. Boudjeloud and F. Poulet

A Validation Methodology in Hierarchical Clustering. F. Sousa and J. Tendeiro

Determining the number of groups from measures of cluster stability. G. Bel Mufti, P. Bertrand and L. El Moubarki

11:00 - 12:30 [room 4]

Contributed session DAL 1 – *Discriminant analysis and learning* (Chair: J.-P. Rasson)

Classification via kernel regression based on univariate product density estimators. B. Hafdi, A. Merbouha and A. Mkhadri

Model Selection for Multi-class SVMs. Y. Guermeur, M. Maumy and F. Sur

Model Selection in Classification: the Swapping Method. J.J. Daudin and T. Mary-Huard

11:00 - 13:00 [room 5]

Contributed session MS 1 – *Mathematical statistics* (Chair: S. Zacks)

Identification, estimation and control of uncertain dynamic systems: a nonparametric approach. N. Hilgert, V. Rossi and J.P. Vila

Nonparametric Frontier estimation: A Multivariate Conditional Quantile Approach. A. Daouia and L. Simar

Empirical likelihood for non-degenerate U-statistics. B.Y. Jing, J. Yuan and W. Zhou

Two results in statistical decision theory for detecting signals with unknown distributions and priors in white Gaussian noise. D. Pastor

11:00 - 12:30 [room 6]

Contributed session RSA 1 – Reliability and Survival Analysis (Chair: R. Pérez Ocón)

On Marshall-Olkin extended Weibull distribution and its application to censored data. M.E. Ghitany

Diagnostic tests for frailty. P. Economou and C. Caroni

On Thresholds of Moving Averages With Prescribed On Target Significant Levels. A. R. Soltani

13:00 - 14:30 **Lunch Break**

14:30 - 16:30 [Mériidienne]

Invited session ATD 1 – Statistical Analysis of Textual Data 1 (Organizer/Chair: L. Lebart, France)

Visualization of textual data: unfolding the Kohonen maps. L. Lebart

Efficient Processing of Extra-grammatical Sentences: Comparing and Combining two approaches to Robust Stochastic Parsing. M. Rajman, M. Ailomaa, J.C. Chappelier and V. Kadlec

Clustering units from frequency and nominal variables. Application to survey data with closed and open-ended questions. M. Bécue-Bertaut and J. Pagès

14:30 - 16:30 [room 1]

Invited session KMDM 2 – Mining High Dimensional Data (Organizer/Chair: S. Lallich, France)

Visualisation and exploration of high-dimensional data using a “force directed placement” method: application to the analysis of genomic signatures. S. Lespinats, A. Giron and B. Fertil

About the locality of kernels in high-dimensional spaces. D. Francois, V. Wertz and M. Verleysen

Quality measure based on Kohonen maps for supervised learning of large high dimensional data. E. Prudhomme and S. Lallich

14:30 - 16:30 [room 2]

Invited session DA 2 – Functional data analysis (Organizer/Chair: G. Biau, France)

Classification in Hilbert Spaces with Support Vector Machines. F. Rossi and N. Villa

Functional Learning with Wavelets. L. Rouvière

PLS discriminant analysis for functional data. C. Preda and G. Saporta

14:30 - 16:30 [room 3]

Invited session FA 1 – *Special Models, Methods and Techniques: Chaotic, Neuro-Fuzzy, and Delay-logistic* (Organizer/Chair: C. Skiadas, Greece)

Chaotic aspects of a GRM1 innovation diffusion model. C. H. Skiadas, G. Rompogiannakis, A. Apostolou and J. Dimotikalis

A new modeling approach investigating the diffusion of mobile telecommunication services in EU-15. A. N. Giovanis and C. H. Skiadas

Time series prediction of the Greek manufacturing index for the non-metallic minerals sector using a Neuro-fuzzy approach (ANFIS). G. Atsalakis, C. Ucenic and C. H. Skiadas

14:30 - 16:30 [room 4]

Invited session IM 1 – *Internet Modelling* (Organizer/Chair: S. Vaton, France)

Modelling and analysis of Internet Pricing: introduction and challenges. Y. Hayel, P. Maillé and B. Tuffin

Asymptotic behavior of a GPRS/EDGE system with several cells controlled by a global capacity limit. G. Nogueira, B. Baynat and P. Eisenmann

Estimation of the Memory index of transmission rate measurements using an Infinite Source Poisson model. G. Faÿ, F. Roueff and Ph. Soulier

14:30 - 16:00 [room 5]

Contributed session FI 1 – *Finance and Insurance* (Chair: R. Manca)

Fair valuation schemes for life annuity contracts. M. Coppola, E. Di Lorenzo and M. Sibillo

The fair valuation of Life Insurance Participating Policies: the mortality Risk Role. M. Politano

The relationship between Stock Market Returns and Inflation: An econometric investigation using Greek data. D. Ioannides, C. Katrakilidis and A. Lake

14:30 - 16:00 [room 6]

Contributed session RSA 2 – *Reliability and Survival Analysis* (Chair: Caroni)

Towards a filter-based EM-algorithm for parameter estimation of Littlewood's software reliability model. J. Ledoux

On two new methods for constructing multivariate probability distributions with systems reliability motivations. J. Filus and L. Filus

A reliability system governed by a LDQBD process. R. Pérez-Ocón, D. Montoro-Cazorla and J. E. Ruiz-Castro

16:30 - 17:00 **Coffee Break**

17:00 - 19:00 [Mériidienne]

Invited session MP 2 – *Hidden Markov Models* (Organizer/Chair: W. Pieczynski, France)

Hidden Markov models in sequence analysis; gene detection and protein structure prediction. F. Rodolphe

Visual tracking and auxiliary discrete processes. P. Pérez and J. Vermaak

On triplet Markov chains. W. Pieczynski and F. Desbouvries

Variations on Markovian Quadtree Model for Multiband Astronomical Image Analysis. C. Collet and F. Flitti

17:00 - 19:00 [room 1]

Invited session ATD 2 – *Statistical Analysis of Textual Data 2* (Organizer/Chair: L. Lebart, France)

Conceptual document indexing using a large scale semantic dictionary providing a concept hierarchy. M. Rajman, P. Andrews, and M. del Mar Perez Almenta

Markov Clustering and Clustering Stability for the Improvement of a Dictionary of Synonyms. D. Gfeller, J.C. Chappelier and P. de los Rios

Evaluation of a Probabilistic Method for Unsupervised Text Clustering. L. Rigouste, O. Cappé and F. Yvon

17:00 - 18:30 [room 2]

Contributed session FI 2 – *Finance and Insurance* (Chair: E. Di Lorenzo)

An application of the stochastic McShane's equations in financial modelling. G. Constantin

Brownian Laplace motion and its use in financial modelling. W. J. Reed

Managing Value-at-Risk for a bond using bond put options. G. Deelstra, A. Ezzine, D. Heyman and M. Vanmaele

17:00 - 19:00 [room 3]

Contributed session HEA 1 – *Health* (Chair: B. Ouhbi)

Product-limit estimators of the survival function with left or right censored data. V. Patilea and J.M. Rolin

Stochastic Models Applied in Health Care and Medical Education. A. Prodan, M. Rusu, R. Prodan and R. Campean

Parametric and Non Homogeneous Semi Markov Model for HIV control. E. Mathieu, Y. Foucher, P. Dellamonica and J.P. Daures

Modelling the recurrence of bladder cancer. G. Rubio, C. Santamaria, B. Garcia, and J. L. Pontones

17:00 - 19:00 [room 4]

Contributed session SP 1 – *Spatial Processes* (Chair: L. Simar)

A Statistical Analysis of the 2D Discrete Wavelet Transform. A. Isar, S. Moga, and X. Lurton

Stochastic restoration of local-scale meteorological records under urban heat island signal. P. S. Lucio and R. Deus

Prediction and Conditional Simulation of a 2D Lognormal Diffusion Random Field. R. Gutierrez, C. Roldan, R. Gutiérrez-Sanchez and J. M. Angulo

Approximating processes of stochastic diffusion models under spatial uncertainty. L. Jodar, J. C. Cortes, P. Sevilla and L. Villafuerte

17:00 - 18:00 [room 5]

Contributed session DAL 2 – *Discriminant analysis and learning* (Chair: F. Rossi)

High Dimensional Discriminant Analysis. C. Bouveyron, S. Girard and C. Schmid

Learning fitness function in a combinatorial optimization process. F. Clerc, R. Rakotomalala and D. Farrusseng

18:00 - 19:00 [room 5]

Contributed session CLU 2 – *Clustering* (Chair: F. Brucker)

Hierarchical Classification for Seabed Characterization. C. Osswald and A. Martin

On the Fitting and Consensus of Classification Systems. B. Leclerc

19:30 **Welcome Reception at Brest City Hall.**

WEDNESDAY, MAY 18, 2005

8:30 - 9:00 [Hall]

Registration Desk

9:00 - 10:00 [Mérienne]

Plenary session II (Chair: G. Saporta)

Weighted Cramér-von Mises-type Statistics. Paul Deheuvels (Université Paris 6, France)

10:00 - 10:30 **Coffee Break**

10:30 - 12:30 [Mérienne]

Invited session KMDM 3 – Visualization and Data Mining (Organizer/Chair: F. Poulet, France)

Exploratory Data Analysis Leading towards the Most Interesting Binary Association Rules. A. Iodice D'Enza, F. Palumbo and M. Greenacre

Dimension Reduction for Visual Data Mining. E. Fangseu Badjio and F. Poulet

Data Visualizations on small and very small screens. M. Noirhomme-Fraiture, F. Randolet, L. Chittaro and G. Custinne

10:30 - 12:30 [room 1]

Invited session BS 1 – Biological Data Analysis (Organizers/Chair: O. Hudry, France and A. Guénoche, France)

A Hidden Markov Model applied to 3D structure of proteins analysis. AC. Camproux, F. Guyon, R. Gautier, J. Laffray and P. Tufféry

Classification of Domains with boosted Blast. C. Capponi, G. Fichant, Y. Quentin, F. Denis

A segmentation-Clustering problem for the analysis of array CGH data. F. Picard

10:30 - 12:30 [room 2]

Invited session DAL 3 – Supervised prediction with Neural Networks and SVM (Organizer/Chair: F. Vermet, France)

Invariances in Classification : an efficient SVM implementation. G. Loosli, S. Canu, S.V.N. Vishwanathan and A. J. Smola

Learning Numbers From Graphs. A. Goulon, A. Duprat, G. Dreyfus

Testing the number of parameters of multidimensional MLP. J. Rynkiewicz

10:30 - 12:30 [room 3]

Invited session DA 3 – *The Symbolic Approach in the Analysis of Interval and Distributional Data 1* (Organizers/Chair: P. Brito, Portugal and Y. Lechevallier, France)

S-Class: An Unsupervised Divisive Classification and some Possible "Dual" Alternatives. J.-P. Rasson, F. Rolland, J.-Y. Pirçon, S. Adans and P. Lallemand

Normalized k-means clustering of hyper-rectangles. M. Chavent

Generalized Symbolic Marking of Complex Objects through Intelligent Complex Miner Software - CRM Applications. M. Gettler-Summa, F. Vautrain and M. Barrault

10:30 - 12:30 [room 4]

Invited session FI 3 – *Migration credit risk models* (Organizer/Chair: J. Janssen, Belgium & France)

Valuing Credit Default Swap in a non-Homogeneous Semi-Markovian Rating-Based Model. G. D'Amico, G. De Medici and J. Janssen

Credit risk migration semi-Markov models: a reliability approach. G. D'Amico, J. Janssen and R. Manca

Credit Var Models, how to use it in practice. J.M. Dumas

10:30 - 12:00 [room 5]

Contributed session MS 2 – *Mathematical statistics* (Chair: N. Hilgert)

Asymptotic Efficiency in Censored Alternating Renewal Processes. E. E. Alvarez

Asymptotic results for the MPL estimators of the Contact Process. X. Guyon and B. Pumo

An Application of MCMC Methods and Mixture of Laws to Determination of Specifications in Agroalimentary Industry. J. Cornebise and M. Maumy

12:30 - **Lunch Break**

12:45 **Bus Pick-up** at 'Le Quartz' Conference Center (to the 'Oceanopolis' Museum restaurant) for the participants who take part in the Conference lunch of May 18th.

15:00 **Bus Pick-up** at 'Le Quartz' Conference Center (to the boarding quay) for the participants who take part in the boat trip but do not attend the lunch at the 'Oceanopolis' Museum restaurant.

16:15 - 17:45 **Boat trip round the bay of Brest.**

THURSDAY, MAY 19, 2005

8:30 - 9:00 [Hall]

Registration Desk

9:00 - 10:00 [Mériidienne]

Plenary Session III (Chair: P. Bertrand)

The Entire Regularization Path for the Support Vector Machine. Trevor Hastie (Stanford University, USA)

10:00 - 10:30 **Coffee Break**

10:30 - 12:30 [Mériidienne]

Invited session MS 3 – *Sequential Analysis and Applications* (Organizer/Chair: J. Glaz, USA)

Sequential Tests for Distributions with Heavy Tails. J. Glaz

Sequential Inspection Sampling with an Application to a Recent Case of Computer Fraud. N. Mukhopadhyay

Exact Evaluation of Operating Characteristics of Stopping Rules and Estimators in Purely Sequential Sampling from Exponential Distributions. S. Zacks

10:30 - 12:30 [room 1]

Invited session DA 4 – *The Symbolic Approach in the Analysis of Interval and Distributional Data 2* (Organizers/Chair: P. Brito, Portugal and Y. Lechevallier, France)

Multidimensional Interval-Data: Metrics and Factorial Analysis. F. Palumbo and A. Irpino

Clayton copula and mixture decomposition. E. Cuvelier and M. Noirhomme-Fraiture

Criterion based divisive clustering: utility in symbolic objects generation. A. El Golli

10:30 - 12:30 [room 2]

Invited session FI 4 – *Stochastic Models for insurance* (Organizer/Chair: R. Manca, Italy)

An application of comonotonicity in multiple state models. J. Spreeuw

Homogeneous Backward Semi-Markov Reward. R. Manca, D. Silvestrov and F. Stenberg

Discrete Time Reward Processes, Stochastic Annuities and Insurance Models. J. Janssen

10:30 - 12:30 [room 3]

Invited session RSA 3 – *Lifetime Data Analysis* (Organizer/Chair: M.-L. Ting Lee, USA)

Estimation methods for the accelerated failure time model. Z. Jin

Adaptive Design for Clinical Trials. M. Chang

Bayesian Analysis for Markers and Degradation. M.-L. Ting Lee, M. Shubina and A. Zaslavsky

10:30 - 11:30 [room 4]

Contributed session DAL 4 – *Discriminant analysis and learning* (Chair: S. Vaton)

Independent Factor Discriminant Analysis. A. Montanari, D. Giovanna Calo and C. Viroli

Measuring Distance from a Training Data Set. I. Juutilainen and J. Röning

11:30 - 12:30 [room 4]

Contributed session KMDM 4 – *Knowledge Management and Data Mining* (Chair: Ph. Lenca)

Expert consulting and information combining: a sequential model. P. Monari, P. Agati and L. Stracqualursi

Analysis of Multinomial Response Data: a Measure for Evaluating Knowledge Structures. A. Ünlü

10:30 - 12:30 [room 5]

Contributed session CLU 3 – *Clustering* (Chair: O. Hudry)

Comparison of distance indices between partitions. L. Denoeud, H. Garreta and A. Guénoche

Kernel Logistic PLS: a new tool for complex classification. A. Tenenhaus, A. Giron, G. Saporta and B. Fertil

A finite time stochastic clustering algorithm. A. B. Dragut

Block clustering with mixture model: comparison of different approaches. M. Nadif and G. Govaert

12:30 - 14:00 **Lunch Break**

14:00 - 15:00 [Médiennne]

Plenary session IV (Chair: J.-P. Barthélemy)

Biological Aggregation at the Interface Between Theory and Practice. William HE Day (Port Maitland, Canada)

15:00 - 15:30 **Coffee Break**

15:30 - 17:30 [Médiennne]

Invited session KMDM 5 – *Business Intelligence* (Organizer/Chair: D. Ho, France)

Indexing by Isotopy. C. Mauceri

Risk Management: An International Regulatory Framework. M. Bara

Data Mining Applications and Implementation Process to Define an Advance Customer Management Strategy for the Finance Industry. B. Sanz Sáiz

15:30 - 17:30 [room 1]

Invited session CLU 4 – Applications of the Kohonen algorithm to data analysis (Organizer/Chair: M. Cottrell, France)

Un algorithme de normalisation des données à l'aide de graphes pour les traitements non-linéaires. C. Aaron

Adaptation de l'algorithme SOM pour l'analyse des données temporelles : applications aux pays de l'Union Européenne et aux candidats à l'adhésion. C. Aaron, C. Perraudin and J. Rynkiewicz

Traitement des données manquantes au moyen de l'algorithme de Kohonen. M. Cottrell and P. Letrémy

15:30 - 17:30 [room 2]

Invited session BS 2 – Bioinformatics (Organizer/Chair: J.-F. Zagury, France)

A new heuristics for the validation of DNA chips analysis tools. A. S. Carpentier, A. Riva, P. Tisseur, G. Didier, J.-L. Risler and A. Hénaut

Reconstruction of Haplotypes for the exploration of diploid genomes. P.-Y. Boelle

Modeling of biological networks. F. D'Alche-Buc, V. Schachter

Hidden Markov Model for protein secondary structure. J. Martin

15:30 - 17:30 [room 3]

Contributed session HEA 2 – Health (Chair: M.-L. Ting Lee)

A heuristic approach in hepatic cancer diagnosis using a probabilistic neural network-based model. M. Gorunescu, F. Gorunescu, M. Ene and E. El-Darzi

Estimating Vaccine Efficacy From Data With Recruitments. C. Lefèvre

Number of segregating sites in a sample of genes under the genetic instability hypothesis. M. Emily and O. François

Play-the-winner rule in clinical trials: models for adaptative designs and Bayesian method. B. Lecoutre and K. Elqasyr

15:30 - 17:30 [room 4]

Contributed session MP 3 – Markov Processes (Chair: O. Chryssaphinou)

Estimation for partially observed semi-Markov processes via self-consistency equations. O. Pons

On the estimation of the entropy rate of finite Markov chains. G. Ciuperca and V. Girardin

Some reward paths in semi Markov models with stochastic selection of the transition probabilities. A. A. Papadopoulou and G. M. Tsaklidis

Non-homogeneous Markov Mixture of Periodic Autoregressions for the Analysis of Air Pollution in the Lagoon of Venice. R. Paroli, S. Pistollato, M. Rosa and L. Spezia

15:30 -17:00 [room 5]

Contributed session QT 1 – *Queues and transportation* (Chair: M. E. Ghitany)

A multicriteria decision method to evaluate local transport service. L. Grassini and A. Viviani

Queues with server vacations in urban traffic. M. de Lurdes Simoes, P. Milheiro Oliveria and A. Pires da Costa

Stability of the two queue system. I. M. MacPhee and L. J. Müller

17:30 - 19:00 [Hall]

Poster session

Nonparametric laws in the performance evaluation of the reliable, unreliable and renewal systems. S. Adjabi, K. Lagha, N. Zougab and H. Touati

On the multivariate kernel distribution estimator for distribution functions under association. C. Azevedo and P. E. Oliveira

Reference curves estimation via Sliced Inverse Regression. A. Gannoun, S. Girard, C. Guinot and J. Saracco

Estimation of the population mean using auxiliary information when some observations are missing. M. del Mar Rueda, S. Gonzales, A. Arcos, Y. Roman and M. D. Martinez

A Comparison of Methods for Joint Modelling of Mean and Dispersion. I. Juutilainen and J. Rönning

Empirical comparison of Arcing algorithms. R. Khanchel and M. Limam

Evaluating the sensitivity of goodness-of-fit indices to data perturbation: An integrated MC-SGR approach. M. Pastore and L. Lombardi

Estimation Statistique de fonctions d'appartenance d'ensembles flous : le cas des fonctions trapézoïdales croissantes. F. Dupuis and A. Hillion

Parameter optimization for Support Vector Regression. B. Üstün, W. J. Melssen and L. M. C. Buydens

Neural network attempt to nonlinear binary factor analysis of textual data. D. Husek, A. A. Frolov, H. Rezankova, V. Snasel, M. Dufosse and P. Polyakov

Computing all-terminal reliability of stochastic networks with Binary Decision Diagrams. G. Hardy, C. Lucet, and N. Limnios

Bayesian Effective Sample and Parameter Size. X. Lin

Weibull survivals with changepoints and heterogeneity. A. M. Lara-Porras, E. Navarrete-Alvarez, J. Garcia-Leal and J. M. Quesada-Rubio

Discrimination between determinist trend and stochastic trend processes. J. Caiado and N. Crato

Protein sequences comparison and classification. G. Gusho

20:00 – **ASMDA 2005 Conference Evening** [*Le Quartz Lounge*]

IBM Awards. J. Delplancq (IBM France DG Delegeue) and D. Ho (Manager of IBM University Relations) .

FRIDAY, MAY 20, 2005

8:30 - 9:00 [Hall]

Registration Desk

9:00 - 10:00 [Mériidienne]

Plenary session V (Chair: J. Janssen)

The stability of Factor Models of Interests rates. Giovanni Barone-Adesi (University of Lugano, Switzerland)

10:00 - 10:30 **Coffee Break**

10:30 - 12:30 [Mériidienne]

Invited session MS 3 – Adaptive estimation (Organizer/Chair: L. Pronzato, France)

Last exit times for a class of asymptotically linear estimators. M. Atlagh, M. Broniatowski and G. Celant

Adaptive M-Estimators For Robust Covariance Estimation. C. Brown, R. Brcic and A. Zoubir

Minimum Entropy Estimators in Semiparametric Regression Problems. L. Pronzato, E. Thierry and E. Wolsztynski

10:30 - 12:30 [room 1]

Invited session DAL 5 – The stakes of construction and use of credit scoring (Organizer/Chair: M. Bardos, France)

What is at stake in the construction and use of credit scores? M. Bardos

Benchmarking State of Art Classification Algorithms for Credit Scoring. B.Baesens, T. Van Gestel, S. Viaene, M. Stepanova, J. Suykens and J. Vanthienen

A review of some semiparametric regression models with application to scoring. J.L. Berthet and V. Patilea

Business cycle and corporate failure in France: is there a link? E. Bataille, C. Bruneau and F. Michaud

10:30 - 12:30 [room 2]

Invited session RSA 5 – Probabilistic Methods in Reliability (Organizer/Chair: S. Ross, USA)

Compound Poisson reliability inequalities. E. Pekoz

Applications of Reliability to Markov Chains. M. Brown

On IFR random variables. S. Ross

10:30 - 12:30 [room 3]

Invited session DA 5 – *Multiway Data Analysis* (Organizer/Chair: J. Diatta, France)

Multiway dissimilarities and Galois closed sets. J. Diatta

Distances à trois voies : concepts théoriques et applications. M. Bennani Dosse

Sequential extraction of clusters from three-way data. B. Mirkin

10:30 - 12:30 [room 4]

Contributed session KMDM 6 – *Visualization and Data Mining* (Chair: M. Noirhomme)

ARQAT: an exploratory analysis tool for interestingness measures. X.H. Huynh, F. Guillet, and H. Briand

Kernel Methods and Visualization for Interval Data Mining. T.N. Do and F. Poulet

Contingency table with a double partition on rows and columns. Visualization and comparison of the partial and global structures. M. Bécue, J. Pagès and C.E. Pardo

Cost of Low-Quality Data over Association Rules Discovery. L. Berti

12:30 - 14:00 **Lunch Break**

14:00 - 16:00 [Méridienne]

Contributed session MP 4 – *Markov Processes* (Chair: V. Girardin)

On Occurrences of Words under Markovian Hypothesis. O. Chryssaphinou, M. Karaliopoulou and N. Linnios

Markovian auto-models with mixed states. C. Hardouin and J.F. Yao

A new detection scheme: the sequential Markov detector. D. Billon

Markov random fields for recognizing textures modeled by feature vectors. F. Forbes, J. Blanchet and C. Schmid

14:00 - 16:00 [room 1]

Contributed session DA 6 – *Data Analysis* (Chair: J. Pagès)

On the use of mutual information in data analysis : an overview. I. Kojadinovic

Multivariate Statistical Analysis Approach In Modeling The Job Related Satisfaction. M. Dziechciarz

Customer satisfaction and PLS structural equation modeling. An application to automobile market. V. Stan and G. Saporta

Combining correspondence analysis and spatial statistics for river water quality assessment and prediction. H. Garcia Pereira and J. Ribeiro

14:00 - 15:30 [room 2]

Contributed session TS 1 – *Time Series* (Chair: D. Pastor)

Nonparametric Regression Estimation in Time Series with Errors-in-variables. D. Ioannides and Ph. Alevizos

Classification of GARCH Time Series: A Simulation Study. T. Kalantzis and D. Papanastassiou

Time Series Analysis, Control Charts: An Industrial Application. A. Messaoud, C. Weihs and F. Hering

14:00 - 15:00 [room 3]

Contributed session FA 2 – *Fuzzy Approach* (Chair: A. Hillion)

Solving fuzzy systems of linear equations by a nonlinear programming method. H. Reynaerts and S. Muzzioli

Input Control In Fuzzy Non-Homogeneous Markov Systems. M. A. Symeonaki and G. B. Stamou

16:00 - 16:20 **Coffee Break**

16:20 - 16:40 [Méridienne]

Closing session