ASMDA 2005

ENST Bretagne **get**

XIᵗʰ International Symposium on

Applied Stochastic Models and Data Analysis

BREST, FRANCE - MAY 17-20, 2005

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Organization committee head:
P. Bertrand (ENST Bretagne, France)

Information:
http://asmda2005.enst-bretagne.fr

Contact:
asmda2005-organisation@enst-bretagne.fr

Submission of papers:
Authors are invited to submit <u>a paper (up to 8 pages) before</u> **December 15, 2004.** Only electronic submissions will be accepted via the Symposium website. <u>Poster proposals will be also accepted</u>. At least one author of the paper or the poster, must be registered by March 15, 2005 for publication in the proceedings.

English and French are the two official symposium languages.

Date lines:

Paper and invited session submission deadline	**Dec. 15, 2004**
Submission of problems	Jan. 31, 2005
Notification to authors	Feb. 15, 2005
Submission of problem solutions	March. 15, 2005
Camera ready paper and registration	March 15, 2005
ASMDA 2005 Conference	May 17-20, 2005

Registration fees:

Students

Before 17/03/05	162 € (incl. Tax.)
After 17/03/05	195 € (incl. Tax.)

University members

Before 17/03/05	270 € (incl. Tax.)
After 17/03/05	324 € (incl. Tax.)

Other participants

Before 17/03/05	405 € (incl. Tax.)
After 17/03/05	486 € (incl. Tax.)

Last call for Papers

General information

Since 1981, the aim of **ASMDA** has been to serve as an interface between Stochastic Modeling and Data Analysis and their real life applications such as business, finance and insurance, management, production and reliability, biology and medicine. The 2005 Symposium will take place in Brest, France. Both theoretical and practical contributions presenting new results and having the potential for solving real-life problems are concerned. More specifically, one main goal of the symposium is to promote new methods for analyzing data, in fields like stochastic modeling, optimization techniques, statistical methods and inference, data mining and knowledge systems, computing-aided decision supports and neural networks.

The symposium will include *keynote presentations*, *invited papers* and *regular papers*. Accepted submissions will be either presented during oral presentations or exposed on posters, without regard of their technical merit.
A *poster session on solving problems* will be organized: the proposed solutions will be presented on posters at the Symposium. Interested authors will find on the ASMDA'05 website, a short list of problems that were proposed by participants and are to be resolved.

An **IBM scientific price** will be awarded to the best student works (1 to 3) presented at the conference. See the ASMDA'05 Website for more information.

Some papers will be selected for publication in international journals. Authors of papers containing a strong computational statistics and data analytic component will be encouraged to submit extended versions for publication in **Computational Statistics and Data Analysis journal**.

Confirmed keynote presentations

Giovani Barone-Adesi (University of Lugano, Switzerland) : "The stability of Factor Models of Interests rates" ; Erhan Cinlar (Princeton University, USA) : "Brownian movement in gamma fields" ; William H. E. Day (Port Maitland, Canada) : "Biological Aggregation at the Interface Between Theory and Practice" ; Paul Deheuvels (Université Paris 6, France) : title to be precised ; Trevor Hastie (Stanford University, USA) : "The Entire Regularization Path for the Support Vector Machine".

Confirmed invited sessions

Modeling functional data analysis in practice (Pr. M.-J. Valderrama, Sp.); Functional statistics (Pr. G. Biau, Fr.); Sequential Analysis and Applications (Pr. J. Glaz, USA); Migration credit risk models (Pr. J. Janssen, Belg. & Fr.); Stochastic Models for insurance (Pr. R. Manca, It.); Probabilistic Methods in Reliability (Pr. S. Ross, USA); Statistical Analysis of data text (Dr. L. Lebart, Fr.); Bioinformatics (Pr. J.-F. Zagury, Fr.); Semi-Markov Processes: Estimation and Control (Pr. N. Limnios, Fr.); Lifetime Data Analysis (Pr. M.-L. Ting Lee, USA); Internet Modelling (Dr. S. Vaton, Fr.); Business Intelligence (Dr. D. Ho, Fr.); Biological Data Analysis (Pr. O. Hudry, Fr., and Dr. A. Guénoche, Fr.); Degradation and Accelerated Models in Life Sciences and Industry (Pr. M. Nikulin, Fr.); The stakes of construction and use of credit scoring (Dr. M. Bardos, Fr.); Special Models, Methods and Techniques: Chaotic, Neuro-Fuzzy, and Delay-logistic (Pr. C. Skiadas, Gr.).

Call for invited sessions

The organization of invited sessions is encouraged. Prospective organizers are requested to send a session proposal together with the three invited papers list (see the Website for details).

Main topics

1) *Methodological approaches:* Poisson models; Markov models and extensions (semi-Markov, hidden-Markov, non homogeneous Markov , …); Point processes (Poisson, …); Martingales, stochastic calculus; Diffusion and Poisson approximations; Stochastic control and decision; Asymptotic models and weak convergences; Statistical inference for stochastic processes; Fitting models for data; Reliability and survival analysis; Bayesian inference; Functional data analysis; Discriminant and regression analysis; Mixture model and probabilistic approach to clustering; Theories of uncertainty; Graphical models and Bayesian networks; Multidimensional scaling and multi-way data analysis; Sensory analysis; Classification; Data and text mining; Analysis of complex data: incomplete, censored, missing, spatio-temporal, imprecise, fuzzy, etc.

2) *Special techniques and algorithms:* Neural Networks; Genetic and fuzzy algorithms; Support vector machine, Monte Carlo Methods.

3) *Application fields:* Engineering; Production; Inventory and logistics; Reliability and maintenance; Planning and control; Quality control; Finance and insurance; Management and administration; Marketing; Environment; Human resources; Biotechnology; Bioinformatics, genome and medicine; Signal processing and telecommunication.