



## **ASMDA 2013**

# XV International Conference on Applied Stochastic Models and Data Analysis

25 - 28 June 2013 Mataró (Barcelona), Spain

www.asmda.es



Since 1981, ASMDA aims to serve as an interface between Stochastic Modeling and Data Analysis and their real-life applications, in particular, in Business, Finance and Insurance, Management, Production and Reliability, Biology and Medicine.

Our main objective is to publish papers, both theoretical and practical, presenting new results that have potential to solve real-life problems. Another important objective is to present new methods focusing on these problems through data analysis. The use of recent advances in different fields, for example, new optimization and statistical methods, data warehouse, data mining and knowledge systems, computer-aided decision supports and neural computing is also promoted.

The role played by ASMDA as a link between theory and practice augments the value of the society's symposia and the interest to these activities both from academic researchers and the world of business. High standards of the society's meetings are guaranteed by strong international scientific committees and are monitored by a permanent world-wide ASMDA Committee.

The preceding international ASMDA Symposia were organized in Brussels (1981, 1983, 1985), Belgium, in Nancy (1988), France, in Granada (1991), Spain, in Chania (1993), Greece, in Dublin (1995),

Ireland, in Anacapri (1997), Italy, in Lisboa (1999), Portugal, in Compiègne (2001), France, in Brest (2005), France, in Chania (2007), Greece, in Vilnius (2009), Lithuania, and in Rome (2011), Italy. The 2013 ASMDA Conference will focus on new trends in theory, applications and software for Applied Stochastic Models and Data Analysis. A particular emphasis will be given to interesting applications in engineering, production and services (maintenance, reliability, planning and control, quality control, finance, insurance, management and administration, inventory and logistics, marketing, environment, human resources, biotechnology, medicine, ...).

ASMDA 2013 will take place in Mataró (Barcelona), Spain

### Methodological approaches

Poisson, Markov, semi-Markov processes,
Point processes,
Martingales, Stochastic calculus,
Random evolutions,
Decision and Controlled Processes,
Diffusion and Poisson approximations,
Asymptotic models and Weak Convergences,
Statistical inference for Stochastic processes ,
Hidden Markov and semi-Markov 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

Analysis of complex data (incomplete, censored,

missing, spatio-temporal, imprecise, fuzzy,...),

Theories of uncertainty,
Graphical models and Bayesian networks,
Multidimensional Scaling and Multi-way Data
Analysis,
Sensory Analysis,
Classification and Documentation,
Data and Text Mining,
Chaotic and Stochastic processes,
Analysis of Chaotic processes.

#### Special techniques and algorithms

Neural Networks, Genetic and Fuzzy Algorithms, Support Vector Machine, Monte Carlo Methods Chaotic Simulation.

#### **Papers and Presentations**

The ASMDA 2013 Conference includes three types of presentations\*

Keynote Plenary Talks on the main topics of the Conference selected by the Scientific Program Committee; Contributed papers proposed by authors; Invited specialized sessions approved by the Scientific Program Committee\*\*.

- \*Poster presentations are accepted
- \*\* Special sessions proposals from experts working on a special topic belonging to the ASMDA fields are also accepted



The 15th ASMDA 2013 in Mataró (Barcelona), Spain

**ASMDA International** 32 years 1981 - 2013 Conferences and Meetings

Conference co-chair

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Conference co-chairs

**Prof. Raimondo Manca**University of Rome "La Sapienza" Italy

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