



Milan, 14-16 September 2009

 POLITECNICO DI MILANO



## Conference Program

**S.Co.**<sup>2009</sup>





## Conference Schedule

	Monday 14 September	Tuesday 15 September	Wednesday 16 September
9:00 – 10:00			
10:00 – 11:00	Opening	Sessions: C1 C2 C3	Sessions: F1 F2 F3
11:00 – 11:45		Coffee Break	Coffee Break
11:45 – 12:45	Plenary Session: P1	Plenary Session: P2	Plenary Session: P3
12:45 – 14:00	Lunch	Lunch	Lunch
14:00 – 16:00	Sessions: A1 A2 A3	Sessions: D1 D2 D3	Sessions: G1 G2 G3
16:00 – 16:30	Coffee Break	Coffee Break	Coffee Break
16:30 – 17:30	Sessions: B1 B2 B3	Sessions: E1 E2 E3	Plenary Session: P4
17:30 – 18:30			Closure
20:00		Social Dinner	



# Conference Sessions

<b>P1</b> (Plenary)	<b>Applied Nonparametric Bayes</b> <i>Michael Jordan</i>
<b>P2</b> (Plenary)	<b>Computer-intensive Conditional Inference</b> <i>Alastair Young</i>
<b>P3</b> (Plenary)	<b>Linear Models for Output-Buffered Systems</b> <i>James O. Ramsay</i>
<b>P4</b> (Plenary)	<b>Predictive densities and prediction limits based on predictive likelihood</b> <i>Paolo Vidoni</i>
<b>A1</b> (Invited) Risk Analysis  <i>Chair: Elena Stanghellini</i> <i>Discussant: Elena Stanghellini</i>	<b>Archimedean Copulae and Market Risk in a Financial Crisis Perspective</b> <i>Giovanni De Luca, Giorgia Riveccio, Paola Zuccolotto</i> <b>Some issues emerging in evaluating the risk of default for SMEs</b> <i>Giovanna Menardi</i> <b>Predicting default probabilities using balance sheet indicators</b> <i>Fabio Rigat</i>
<b>A2</b> (Invited) Functional Data Analysis  <i>Chair: Aldo Goia</i> <i>Discussant: Aldo Goia</i>	<b>Spline Estimators for functional linear regression</b> <i>Alois Kneip, Pascal Sarda, Christophe Crambes</i> <b>Low/High dimensional approaches and functional predictor</b> <i>Frédéric Ferraty, Peter Hall, Philippe Vieu</i> <b>Testing structural assumptions in regression when the covariate is functional</b> <i>Laurent Delsol, Frédéric Ferraty, Philippe Vieu</i>
<b>A3</b> (Contributed) Sensitivity Analysis and Robust Methods  <i>Chair: Andrea Pastore</i>	<b>Robust and Explicit Estimators for Weibul Parameters</b> <i>Kris Boudt, Derya Caliskan, Christophe Croux</i> <b>Dynamic Fault Scenarios For Training A Fuzzy C-Mean Fault Classifier</b> <i>Francesco Di Maio, Piercesare Secchi, Marco Stasi, Simone Vantini, Enrico Zio</i> <b>Heteroscedastic regression in robust econometrics</b> <i>Jan Kalina</i> <b>A comparison of quasi-likelihood ratios for general estimating functions</b> <i>Nicola Lunardon, Laura Ventura</i>



# Conference Sessions

<p><b>B1</b> (Invited)  <b>Data mining of health databases from a statistical perspective</b></p> <p><i>Chair: Maurizio Marzegalli Discussant: Daniela Cocchi</i></p>	<p><b>Usefulness of administrative databases for epidemiological evaluations and healthcare planning</b>  <i>Pietro Barbieri, Mauro Maitrello</i></p> <p><b>Statistical Analysis of an integrated Database concerning patients with Acute Coronary Syndromes</b>  <i>Francesca Ieva, Anna Maria Paganoni</i></p> <p><b>Patient selection to enhance long-term benefit of first generation drug-eluting stents for coronary revascularization procedures. Insights from a large multicenter registry</b>  <i>Paolo Guastaroba, Antonio Marzocchi</i></p> <p><b>La banca dati "ALEAO" della regione Lombardia e la sua interrogazione a fini statistici</b>  <i>Carlo Zocchetti</i></p>
<p><b>B2</b> (Invited)  <b>Shape Analysis</b></p> <p><i>Chair: Luigi Ippoliti Discussant: Vincenzo Capasso</i></p>	<p><b>Curves prediction in shape analysis</b>  <i>Antonio Gattone, Luigi Ippoliti, Pasquale Valentini</i></p> <p><b>Statistical Aspects of Size Functions for the Description of Random Shapes</b>  <i>Alessandra Micheletti</i></p> <p><b>Finite-sample consistency of permutation tests in shape analysis</b>  <i>Chiara Brombin, Pier-Francesco Galzignato, Fortunato Pesarin, Luigi Salmaso</i></p> <p><b>A likelihood approach to shape analysis</b>  <i>Alfred Kume</i></p>
<p><b>B3</b> (Contributed)  <b>Risk and Forecasting</b></p> <p><i>Chair: Corrado Provasi</i></p>	<p><b>Functional Principal Component Analysis for Dynamic Fault Scenario Classification</b>  <i>Francesco Di Maio, Piercesare Secchi, Simone Vantini, Enrico Zio</i></p> <p><b>Market potential dynamics and diffusion of innovation: modelling synergy between two driving forces</b>  <i>Renato Guseo, Mariangela Guidolin</i>.</p> <p><b>Does really Morningstar account for risk?</b>  <i>Francesco Lisi, Massimiliano Caporin</i></p> <p><b>Forecasting spot electricity prices through combination of forecasts</b>  <i>Fany Nan, Silvano Bordignon, Francesco Lisi</i>.</p>



# Conference Sessions

<b>C1</b> (Contributed) <b>Time Series</b> <i>Chair: Silvano Bordignon</i>	<b>Forecasting Italian turnover using new orders: a comparison between time series and panel data approach</b> <i>Fabio Bacchini, Roberto Iannaccone, Danilo Orsini</i> <b>A Regime Switching Long Memory Model to Forecast Realized Volatility</b> <i>Silvano Bordignon, Davide Raggi</i> <b>Variance Initialisation in GARCH Estimation</b> <i>Matteo Pelagatti, Francesco Lisi</i> <b>A Sparse Loading Full-factor Multivariate GARCH model</b> <i>Yan Sun, Xiaodong Lin</i>
<b>C2</b> (Contributed) <b>Statistical Methods for functional and complex data</b> <i>Chair: Maurizio Vichi</i>	<b>Reliability studies of the log-exponential inverse Gaussian distribution</b> <i>M.E. Ghitany, D.K. Al-Mutairi, Ramesh C. Gupta</i> <b>Test of Normality based on Nonlinear Principal Components</b> <i>Aldo Goia, Ernesto Salinelli, Pascal Sarda</i> <b>Monitoring Form Conversion through Batch Level Process Analytical Data</b> <i>Taniya Mandal, Jo Ann Coleman, James Rydzak</i> <b>Gauge imprecision and multivariate process capability analysis</b> <i>Michele Scagliarini</i>
<b>C3</b> (Contributed) <b>Sampling and estimation</b> <i>Chair: Lorenzo Fattorini</i>	<b>Merging Information for Semiparametric Adaptive Projection Density Estimation</b> <i>Jean-Baptiste Aubin, Samuela Leoni-Aubin</i> <b>On the Optimal Designs for the Universal Kriging</b> <i>Alessandro Baldi Antognini, Maroussa Zagoraiou</i> <b>Bootstrap algorithms for variance estimation in complex survey sampling</b> <i>Alessandro Barbiero, Fulvia Mecatti</i> <b>Analysis of correlation among components of a Flexible Dirichlet Distribution</b> <i>Gianna S. Monti</i>



# Conference Sessions

<p><b>D1</b> (Invited)  <b>Bayesian Nonparametrics</b></p> <p><i>Chair: Antonio Lijoi</i>  <i>Discussant: Matteo Ruggiero</i></p>	<p><b>Superposition of beta processes</b>  <i>Pierpaolo De Blasi, Stefano Favaro, Pietro Muliere</i></p> <p><b>A new estimator for the number of unobserved species in a random sample</b>  <i>Alberto Gandolfi</i></p> <p><b>Bayesian modeling via nested random partitions</b>  <i>Sonia Petrone, Lorenzo Trippa</i></p> <p><b>Some robustness issues in predictive sequential elicitation of an exchangeable binary process</b>  <i>Luca Tardella</i></p>
<p><b>D2</b> (Invited)  <b>Graphical models – probabilistic expert systems</b></p> <p><i>Chair: Alberto Roverato</i>  <i>Discussant: Giovanni Marchetti</i></p>	<p><b>Graphical log-linear models for homologous factors</b>  <i>Anna Gottard</i></p> <p><b>Expected posterior priors for model comparison in a class of discrete graphical models</b>  <i>Guido Consonni, Monia Lupparelli</i></p> <p><b>Clustering variables with DAG structure</b>  <i>Alberto Roverato, F. Marta L. Di Lascio</i></p> <p><b>Non Local Alternative Priors for Gaussian Directed Acyclic Graphical Models</b>  <i>Luca La Rocca, Guido Consonni</i></p>
<p><b>D3</b> (Contributed)  <b>Biodata Mining</b></p> <p><i>Chair: Anna Maria Paganoni</i></p>	<p><b>Texture Analysis in Thermal Infrared Imaging for Classification of Raynaud's Phenomenon</b>  <i>Graziano Aretusi, Lara Fontanella, Luigi Ippoliti</i></p> <p><b>Fast Bayesian Functional Data Analysis: Application to basal body temperature data</b>  <i>James M. Ciera, Bruno Scarpa, David B. Dunson</i></p> <p><b>Likelihood asymptotics for the stress-strength model <math>P(X &lt; Y)</math></b>  <i>Giuliana Cortese, Laura Ventura</i></p> <p><b>Finite mixture regression models: assessing prognostic factors of survival in cirrhotic patients</b>  <i>Agata Zirilli, Romana Gargano, Angela Alibrandi</i></p>



# Conference Sessions

<b>E1</b> (Invited) <b>Flexible Models</b>  <i>Chair: Anna Clara Monti</i> <i>Discussant: Andrea Tancredi</i>	<b>Directed Evolutionary Algorithms by Means of the Skew-Normal Distribution</b> <i>Stefan Berlik</i> <b>Black Litterman model in a Skew Normal Market</b> <i>Francesco Simone Blasi</i> <b>On the Fisher information matrix and the profile log-likelihood function in multivariate skew-symmetric models</b> <i>Christophe Ley</i> <b>Density estimation by skew-normal kernels</b> <i>Luca Greco, Stefano M. Pagnotta</i> <b>Multivariate measures of Skewness in Skew-Normal distribution</b> <i>Bruno Scarpa</i>
<b>E2</b> (Contributed) <b>Bayesian Statistics 2</b>  <i>Chair: Alessandra Guglielmi</i>	<b>A Generalized Sequential Construction of Exchangeable Gibbs Partitions with Application</b> <i>Annalisa Cerquetti</i> <b>Exact Bayesian smoothing in triplet switching Markov chains</b> <i>Wojciech Pieczynski, Francois Desbouvries</i> <b>Clustering Rates of Convergence for Bayes Estimators of Mixtures of Exponential Power Densities</b> <i>Catia Scricciolo</i> <b>Bayesian Analysis of D-decomposable Bidirected Graphical Models for Discrete Data</b> <i>Claudia Tarantola, Ioannis Ntzoufras</i>
<b>E3</b> (Contributed) <b>Computational Methods for Stochastic Processes</b>  <i>Chair: Piercesare Secchi</i>	<b>How do the states of a Markov chain behave together with respect to an absorbing class: the target algorithm</b> <i>Giacomo Aletti, Diane Saada</i> <b>Curves prediction in shape analysis</b> <i>Antonio Gattone, Luigi Ippoliti, Pasquale Valentini</i> <b>On Prediction of Future Record Values</b> <i>Mohamed Mahmoud Ould Aboubacrine</i> <b>Discrete Time Scale invariant Markov Processes</b> <i>Navideh Modarresi, Saeid Rezakhah</i>



# Conference Sessions

<b>F1</b> (Invited) <b>Reliability</b>  <i>Chair: Fabrizio Ruggeri</i> <i>Discussant: Fabrizio Ruggeri</i>	<p><b>Markovian Modeling of an Age- and state-dependent Wear Process</b>  <i>Massimiliano Giorgio, Maurizio Guida, Gianpaolo Pulcini</i></p> <p><b>A semiparametric Bayesian mixed-effects model for failure time data</b>  <i>Raffaele Argiento, Alessandra Guglielmi, Antonio Pievatolo</i></p> <p><b>Monte Carlo Simulation Methods for Reliability Estimation and Failure Prognostics</b>  <i>Enrico Zio</i></p> <p><b>Computations in Bayesian Design of Life Tests</b>  <i>Refik Soyer, Nicholas Polson</i></p>
<b>F2</b> (Contributed) <b>Bayesian Statistics 1</b>  <i>Chair: Pietro Muliere</i>	<p><b>Model comparison for proteomic array data</b>  <i>Serena Arima, Antonella Cuteri, Valentina Pecora, Luca Tardella</i></p> <p><b>A matching prior for the shape parameter of the skew-normal distribution</b>  <i>Stefano Cabras, Maria Eugenia Castellanos, Walter Racugno, Laura Ventura</i></p> <p><b>Estimating Value-at-Risk with Product Partition Models</b>  <i>Danilo Delpini, Giacomo Bormetti, Maria Elena De Giuli, Claudia Tarantola</i></p> <p><b>The revision of elicited beliefs on the structure of a Bayesian Network</b>  <i>Federico M. Stefanini</i></p>
<b>F3</b> (Contributed) <b>Functional Statistics</b>  <i>Chair: Stefano Tonellato</i>	<p><b>A simple misspecification test for a wide class of regression models</b>  <i>Jean-Baptiste Aubin, Samuela Leoni-Aubin</i></p> <p><b>Locally adaptive regression techniques for multidimensional curve fitting</b>  <i>Laura M. Sangalli</i></p> <p><b>Curve clustering for misaligned data: the k-mean alignment algorithm</b>  <i>Laura M. Sangalli, Piercesare Secchi, Simone Vantini, Valeria Vitelli</i></p> <p><b>On the Definition of Phase and Amplitude Variability in Functional Data Analysis</b>  <i>Simone Vantini</i></p>



# Conference Sessions

<b>G1</b> (Invited) <b>Biostatistics</b>  <i>Chair: Emanuela Dreassi</i> <i>Discussant: Corrado Lagazio</i>	<p><b>Bayesian non-parametric approach to meta-analysis in environmental epidemiology</b>  <i>Michela Baccini, Annibale Biggeri</i></p> <p><b>Hierarchical Bayesian Models to Integrate Individual Data on Ecological Regression Analysis</b>  <i>Annibale Biggeri, Laura Grisotto, Dolores Catelan</i></p> <p><b>A graphical models approach for comparing gene sets</b>  <i>M. Sofia Massa, Monica Chiogna, Chiara Romualdi</i></p> <p><b>PM Health effects: responses to source-related exposures</b>  <i>Alessio Pollice, Giovanna Jona Lasinio</i></p>
<b>G2</b> (Invited) <b>Bayesian methods for high dimensional data</b>  <i>Chair: Brunero Liseo</i> <i>Discussant: Luca Tardella</i>	<p><b>Diffusion driven empirical Bayes estimation of high-dimensional normal means vectors</b>  <i>Pierpaolo Brutti</i></p> <p><b>Approximate Bayesian Inference for Latent Gaussian Fields using Integrated Nested Laplace Approximations</b>  <i>Sara Martino, Havard Rue</i></p> <p><b>Bayesian approaches to matching and size population problems: a unified framework</b>  <i>Andrea Tancredi</i></p>
<b>G3</b> (Contributed) <b>Hidden Markov Models</b>  <i>Chair: Sonia Petrone</i>	<p><b>The hidden mixture Markov model with application to the analysis of electricity supply: a Bayesian perspective</b>  <i>Nadia Accoto</i></p> <p><b>Exact Bayesian restoration in non-Gaussian Markov-switching Trees</b>  <i>Noémie Bardel, Francois Desbouvries</i></p> <p><b>Bayesian hidden Markov process model of <i>Salmonella</i> over three generations of flocks in broiler production chain</b>  <i>Jukka Ranta, Pirkko Tuominen, Antti Mikkelä, Helene Wahlström</i></p> <p><b>Multivariate Gaussian Hidden Markov Models with an Unknown Number of Regimes</b>  <i>Luigi Spezia</i></p> <p><b>Bayesian inference of a doubly stochastic Poisson process with a non-stationary state process</b>  <i>Elisa Varini, Renata Rotondi</i></p>