BISP9

9th Workshop on

Bayesian Inference in Stochastic Processes

June 14 - 16, 2015, Istanbul

46 researchers from 24 countries (5 continents) participated in the workshop.

Organizing Committee

Fabrizio Ruggeri **Co-Chair**
CNR IMATI

M. Atilla Öner **Co-Chair**
Yeditepe University

Süleyman Özekici
Koç University

Academic Programme Committee

M. Atilla Öner
Yeditepe University

Sonia Petrone
University Bocconi

Fabrizio Ruggeri **Chair**
CNR IMATI

Refik Soyer
George Washington University

Mike Wiper
Univ. Carlos III de Madrid

Workshop Venue

The Point Hotel - Taksim

PROGRAMME

JUNE 15

08:30	Registration
08:55	Fabrizio Ruggeri - Welcome
	Session 1 - Chair: Gürsoy
09:00	Dynamic covariance estimation using sparse factor stochastic volatility models; **Frühwirth-Schnatter, Kastner, Lopes**
09:30	Bayesian non-parametric methods for estimating the intensity of Hawkes process; **Rousseau, Donnet, Rivoirard**
10:00	Sparse graphs using exchangeable random measures; **Caron, Fox**
10:20	**Break**
	Session 2 - Chair: Golightly
10:50	Bayesian inference for stochastic models with jumps; **Alexopoulos, Dellaportas, Papaspiliopoulos**
11:10	Bayesian estimation of an exchangeable increments process; **Anzarut, Mena**
11:30	Bayesian inference for stochastic differential equations; **Fuchs**
11:50	Simulation and inference for one-dimensional diffusions with discontinuous drift; **Taylor, Papaspiliopoulos, Roberts**
12:10	A Bayesian approach to implied probability density function estimation; **ter Horst, Casarin, Leisen, Molina**
12:30	**Lunch**
	Session 3 - Chair: Boys
14:00	Ruin probabilities for Bayesian exchangeable claims processes; **Coen, Mena**
14:20	Bayesian non-parametric inference for partially-observed inhomogeneous Poisson processes; **Kypraios, Knock**
14:40	A marginal sampler for sigma-stable Poisson-Kingman models; **Lomeli, Favaro, Teh**
15:00	Change-point detection on dependent data: a random-partition approach; **Martinez, Mena**
15.20	A birth-death process for feature allocation; **Palla, Knowles, Ghahramani**

15:40	Filtering hidden Markov measures; **Ruggiero, Papaspiliopoulos, Spano**
16:00	**Break**
	Session 4 - Chair: Soyer
16:30	Hypothesis testing for finite and infinite populations; **Bose**
16:50	Medical overpayment estimation models; **Ekin, Musal**
17:10	Dynamic Bayesian network approach to support the management of complex marine ecosystems; **Mengersen, Caley**
17:30	Analysis of the autoregressive model from the Bayesian point of view using Lindley's approximation; **Papadopoulos, Perilioğlu**
17:50	Bayesian non-parametric estimation of the conditional physical measure and its use for the investigation of the pricing kernel monotonicity; **Sala**
18:10	Sex, lies and self-reported counts: general birth-death processes to model self-reported count of sexual behavior; **Suchard, Crawford, Weiss**
18:30	**FREE**
21:00	**Dinner at Point Hotel**

JUNE 16

Session 5 - Chair: Wilson		
09:00	A particle filtering approach to the forecasting of field failures of domestic appliances; **Pievatolo, Ruggeri**	
09:30	Bayesian inference on doubly-stochastic Markov processes; **Özekici, Soyer, Landon**	
10:00	Modeling crack growth in fatigue experiments; **Hermann, Heeke**	
10:20	**Break**	
	Session 6 - Chair: Mengersen	
10:50	Particle filters in high dimensions; **Beskos,Crisan, Jasra, Kamatani, Zhou**	
11:10	Dynamic covariance modeling based on Gaussian processes; **Dellaportas, Plataniotis, Titsias**	
11:30	Sequential Monte Carlo methods for high dimensional inverse problems; **Kantas**	
11:50	Fast Bayesian inference using low discrepancy sequences; **Joshi, Brown, Joe**	
12:10	Fast Bayesian additive regression; **Lopes, Polson**	
12:30	Bayesian inference in homogeneous Poisson processes using massive healthcare data and massive parallelization; **Shaddox, Suchard**	
12:50	**Lunch**	
	Session 7 - Chair: Lopes	
14:20	Sequential Bayesian inference for static parameters in dynamic state space models; **Bhattacharya, Wilson**	
14:40	Normalizing empirically underidentified linear state-space models; **Blais**	
15:00	An approximate closed form Bayesian propagation procedure to accommodate non-normal dynamic processes; **Gargoum**	
15:20	Sequential parameter estimation with iterative functional approximation; **Mai, Wilson**	
15:40	Using Storm for scalable sequential statistical inference; **Roetzer, Wilson, Bhattacharya, Mai, Cogan, Sanchez, Aslett, O'Riordian**	
16:00	**Break**	
	Session 8 Chair: Ruggeri	
16:30	Particle learning for Bayesian non-parametric Markov switching stochastic volatility model; **Virbickaite, Lopes, Ausin, Galeano**	

17:00	Bayesian approaches for brain activation and connectivity in multi-subject studies; **Prado**
17:30	Supporting risk management for aviation safety at state level; **Rios Insua**
18:00	**Free**
19:00	**Departure for Bosphorus Dinner Cruise** 
23:00	**Return to Hotel**

BISP participants presenting papers on Bayesian Nonparametrics are warmly invited to submit their work to a **Statistics and Computing** special issue on Bayesian Nonparametrics. Details are at https://sites.google.com/site/bnpspecialissue/

Invited Speakers

Sylvia Fruewirth-Schnatter, Vienna Univ. of Economics and Business, Austria

David Rios Insua, ICMAT-CSIC, Madrid, Spain

Süleyman Özekici, Koç Univ., Turkey

Antonio Pievatolo, CNR-IMATI, Italy

Judith Rousseau, Universite Paris Dauphine, France

Raquel Prado, Univ of California, Santa Cruz, USA