Welcome to IWSM 2018
Simon Wood

Goodbye moments, hello expectiles
Paul Eilers

Bayesian Spatial Quantile Model Selection
Mauro Bernardi and Mariangela Guidolin

Structured additive multiple-output noncrossing Bayesian quantile regression models
Bruno Santos and Thomas Kneib

Additive quantile regression with random effects: An application to the modelling of longitudinal accelerometer measurements
Marco Geraci

Morning Coffee

Relative importance of terms in regularised linear models
Alkeos Tsokos and Ioannis Kosmidis

Challenging Statistical Significance: A Case for Reverse-Bayes
Leo Held

Lunch
13.40 — 15.00

Penalised maximum likelihood estimation in multistate models with an application to cardiovascular disease
Robson Machado, Ardo van den Hout and Giampiero Marra

Treatment effects beyond the mean using distributional regression
Maike Hohberg, Peter Pütz and Thomas Kneib

Multilevel modelling with level 2 missing covariates: the relationship between student ratings and teacher beliefs and practices
Leonardo Grilli, Maria Francesca Marino, Omar Paccagnella and Carla Rampichini

Statistical modelling of time dependence in peak river flows
Emiko Dupont, Ilaria Prosdocimi and Daniel Simpson

15.00 — 15.30

Afternoon Tea

15.30 — 17.10

Correcting Under-Recording of Eruptions in Historical Volcano Data
Oliver Stoner

New approaches to postprocessing of multi-model ensemble weather forecasts
Clair Barnes and Richard Chandler

Predicting above-ground tree biomass: a Seemingly Unrelated Penalized Regression approach
Dae-Jin Lee and Maria Durban

Spatio-temporal modelling of remote-sensing lake surface water temperature data
Mengyi Gong, Claire Miller and Marian Scott

Attribution of large scale drivers of peak river flows in Ireland
Aoibheann Brady, Julian Faraway and Ilaria Prosdocimi

18.00 — 20.00

Welcome Reception
Tuesday 17th July

9.20 — 10.40
Chair: Luís Machado

Non-homogeneous dynamic Bayesian networks with edge-wise coupled parameters  
*Mahdi Shafiee Kamalabad and Marco A. Grzegorczyk*

Bayesian Effect Fusion for Categorical Predictors in Logistic Regression  
*Magdalena Leitner and Helga Wagner*

Mining signals of astronomical sources via Bayesian nonparametric mixture modelling  
*Andrea Sottosanti, Mauro Bernardi and Alessandra Rosalba Brazzale*

Accelerated estimation of mixture models for rating variables  
*Rosaria Simone*

10.40 — 11.10
Morning Coffee

11.10 — 12.20
Chair: Marco Grzegorczyk

Variational Message passing for skew t regression  
*Luca Maestrini and Matt Wand*

Applied Statistics for Covariance Functions  
*John Aston*

12.20 — 13.50
Lunch
13.50 — 15.10  
Chair: Dan Lawson

Quantifying the impact of air pollution on respiratory prescription rates in Scotland  
Duncan Lee

Estimating dose-response for time-to-remission with instrumental variable adjustment  
Jennifer Hellier, Richard Emsley and Andrew Pickles

Coupled Markov-switching regression: inference and a case study using electronic health record data  
Jennifer Pohle, Ruth King, Mihaela van der Schaar and Roland Langrock

Unified Testing Framework for Feature-sets in Genomics  
Mitra Ebrahimpoor, Roula Tsonaka, Pietro Spitali and Jelle Goeman

15.10 — 15.40  
Afternoon Tea

15.40 — 16.40  
Chair: Bill Browne

Statistical boosting for Markov-switching distributional regression models  
Timo Adam, Andreas Mayr, Thomas Kneib and Roland Langrock

Modeling Ratio Outcomes with Gamma Distributed Components  
Moritz Berger, Michael Wagner and Matthias Schmid

Handling Time Dependent Covariate Effects in Multiple Imputation: Application to Stroke in a Cox Modelling Framework.  
Anna France, Deborah Costain and Andrew Titman

17.30 — 20.00  
Poster Session
Wednesday 18th July

9.00 — 10.40

Chair: Yannig Goude

**Inflated Beta Regression Modelling for Speech Intelligibility Testing**

*Gillian Heller, Wenli Hu and Brett Swanson*

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**A Regularization Approach for the Detection of Differential Item Functioning in Generalized Partial Credit Models**

*Gunther Schauberger and Patrick Mair*

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**A Note on Latent Rating Regression for Aspect Analysis of User-Generated Content**

*Nelu Dan, Ruggero Bellio and Thomas Reutterer*

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**Statistical analysis of semiconductor images**

*Sarah Karasek, Herwig Friedl and Peter Scheibelhofer*

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**Modelling Cryptocurrencies using Robust Time Varying Undirected Graphs**

*Paola Stolfi and Mauro Bernardi*

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10.40 — 11.10

**Morning Coffee**

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11.10 — 12.20

Chair: Haeran Cho

**International Arms Transfers: A Dynamic Separable Network Model With Heterogeneity Components**

*Michael Lebacher, Paul W. Thurner and Göran Kauermann*

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**Multi-state models: Beware the Markov assumption!**

*Hein Putter*

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12.20

**Lunch**

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13.30

**Excursion or free afternoon**
A classification tree for functional data
*Annette Möller and Jan Gertheiss*

Functional principal component analysis for non-stationary dynamic time series
*Amira Elayouty, Marian Scott and Claire Miller*

Boosting Methods for Effects Selection in Cox Frailty Models
*Andreas Groll, Trevor Hastie, Thomas Kneib and Gerhard Tutz*

Effect Selection in Distributional Regression
*Nadja Klein, Thomas Kneib, Manuel Carlan, Stefan Lang and Helga Wagner*

Morning Coffee

Dynamic Chain Graph Models for Ordinal Time Series Data
*Pariya Behrouzi, Fentaw Abegaz and Ernst C. Wit*

A semiparametric extension of the stochastic block model for longitudinal networks
*Catherine Matias*
13.40 — 15.00  
Chair: Nicole Augustin

Analysis of Dependent Pseudo-Panel Data: Proposal and Comparison of Three Different Methodological Approaches  
*Vicente Núñez-Antón, Ainhoa Oguiza and Jorge Virto*

Non-PH parametric survival modelling  
*Gilbert MacKenzie, Yasin Al-Tawarah, Milica Blagojevic and Kevin Burke*

Chain Regression Graph Models for Context-Specific independencies  
*Federica Nicolussi and Manuela Cazzaro*

An Augmented Likelihood Ratio Index for Categorical Response Models  
*Ejike Ugba and Jan Gertheiss*

15.00 — 15.30  
Afternoon Tea

15.30 — 16.50  
Chair: Ilaria Prosdocimi

Could bigger be better? Longer Atlantic salmon smolts seem more likely to return as adults  
*Stephen Gregory*

Modelling of X-ray density (grayscale) signals from CT-scan images of rooted soil  
*Mario Martinez-Araya and R. Murray Lark*

Constrained log-likelihood for partial proportional odds models for ordinal response variables  
*Altea Lorenzo-Arribas, Mark Brewer and Antony Overstall*

An extended random-effects framework for meta-analysis  
*Francesco Sera and Antonio Gasparrini*

19.00  
Conference Dinner  
*Bristol Museum*
Mixture of Experts Models for Joint Insurance Claims Modelling with Multivariate Poisson and Gamma Distributions
Sen Hu, Adrian O’Hagan and Brendan Murphy

The Weibull MPR model for interval censored survival data
Gilbert MacKenzie, Kevin Burke and Defen Peng

Identification issues and efficient inference in semi-parametric cure survival model with shared covariates
Philippe Lambert and Vincent Bremhorst

Covariate-Dependent Spectral Estimation of Multiple Nonstationary Time Series
Ori Rosen, Michael Bertolacci, Edward Cripps and Sally Cripps

Modelling uncertainty and inaccuracy in ordinal data
Sabrina Giordano and Roberto Colombi

The Hot Hand in Professional Darts
Marius Ötting, Roland Langrock, Christian Deutscher and Vianey Leos-Barajas

GLAM: From Graz to Bristol
Iain Currie