## **Classification Society 2015 Program**

McMaster University, Hamilton, Ontario, Canada, June  $3^{rd} - 6^{th}$ , 2015 Registration and coffee breaks are in Hamilton Halls' Math Cafe

All talks are in Hamilton Hall 305 Banquet at Royal Botanical Gardens, Burlington, Ontario

Wed	nesday	, June	3
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5:30pm Shuttle leaves Sheraton Hotel for McMaster University

6:00pm Welcome BBQ McMaster University Club

9:30pm Shuttle leaves McMaster University for Sheraton Hotel

Thursday, June 4

8:00am Shuttle leaves Sheraton Hotel for McMaster University

8:30am Registration HH Math Cafe

8:50am **Opening Remarks** 

Robert Baker, Dean, Faculty of Science

Douglas Steinley, President, Classification Society

9:10am President's Invited Address Chair: Doug Steinley

MULTILEVEL LATENT MARKOV MODELLING IN CONTINUOUS TIME, WITH AN APPLICATION TO THE ANALYSIS OF AMBULATORY MOOD ASSESSMENT DATA

Jeroen Vermunt, Tilburg University

10:10am Coffee Break HH Math Cafe

10:30am Contributed Session 1

MIXTURE OF LATENT TRAIT MODELS WITH THE CONTAMINATED GAUSSIAN DISTRIBUTIONS

Chair: Abby Flynt

Yang Tang, McMaster University

USING COHEN'S KAPPA FOR COMMUNITY DETECTION IN SOCIAL NETWORKS

Michaela Hoffman, University of Missouri at Columbia

VARIABLE SELECTION FOR SKEWED MODEL-BASED CLUSTERING: REVEALING

NOVEL SLEEP PHENOTYPES

Meredith Wallace, University of Pittsburgh

12:00pm Lunch Break

1:30pm Invited Lecture on Psychometrics Chair: Jeroen Vermunt

CLUSTERING HETEROGENEOUS SAMPLES DURING MODEL SELECTION

Katie Gates, University of North Carolina at Chapel Hill

2:30pm Coffee Break

2:50pm CS Distinguished Dissertation Award Session Chair: Stanley Sclove

CLUSTERWISE & SWITCHING COMPONENT MODELS FOR MODELING BETWEEN-& WITHIN-BLOCK STRUCTURAL DIFFERENCES IN MULTIVARIATE MULTIBLOCK DATA

Kim De Roover, KU Leuven

NON-ELLIPTICAL & FRACTIONALLY-SUPERVISED CLASSIFICATION

Irene Vrbik, McGill University

4:00pm Poster Session McMaster University Club

5:45pm Shuttle leaves McMaster University for Sheraton Hotel

7:00pm Social

Friday, June 5

7:55am Shuttle leaves Sheraton Hotel for McMaster University

8:30am **President's Address** Chair: Herbie Lee

ADVANCES AND NEW ROLES FOR PARTITION AGREEMENT

Doug Steinley, University of Missouri at Columbia

9:30am Coffee Break HH Math Cafe

9:50am Invited session on 50 years of the Classification Society Chair: Arthur Kendall SOME REFLECTIONS ABOUT THE EARLY YEARS James Rohlf, Stony Brook University THE CLASSIFICATION SOCIETY: THE FIRST FIFTY YEARS Stanley Sclove, University of Illinois at Chicago THE JOURNAL OF CLASSIFICATION: THE FIRST THIRTY YEARS Willem Heiser, Leiden University 10:50am **Invited Lecture on Big Data** Chair: Paul McNicholas TOWARDS A NEW SCIENCE OF BIG DATA ANALYTICS, BASED ON THE GEOMETRY & THE TOPOLOGY OF COMPLEX, HIERARCHIC SYSTEMS Fionn Murtagh, Goldsmiths, University of London and University of Derby 11:50pm Lunch Break **Classification Society Board Meeting** HH 207 Chair: Brian Franczak 1:20pm **Invited Lecture on Classification Methodology** MODEL-BASED CLUSTERING OF CATEGORICAL DATA BY RELAXING CONDITIONAL *INDEPENDENCE* Vincent Vandewalle, University Lille 2 2:20pm Coffee Break 2:40pm **Contributed Session 2** Chair: Salvatore Ingrassia A HIDDEN TRUNCATION HYPERBOLIC DISTRIBUTION Paula Murray, McMaster University NEW APPROACHES FOR PREDICTION & INFERENCE WITH CLASSIFICATION TREE ENSEMBLES Samuel Ventura, Carnegie Mellon University MODEL SELECTION IN GAUSSIAN MIXTURE MODELING: A COMPARISON OF 21 FIT STATISTICS Emilie Shireman, University of Missouri at Columbia HH 305 4:10pm **Classification Society General Meeting** 5:00pm Shuttle leaves McMaster for RBG (Tour and Banquet) Shuttle leaves McMaster for Sheraton Hotel 5:10pm 6:00pm Shuttle leaves Sheraton Hotel for RBG (Tour and Banquet) 10:00pm Shuttle leaves RBG for Sheraton Hotel 10:30pm Shuttle leaves Sheraton Hotel for McMaster University Saturday, June 6 8:20am Shuttle leaves Sheraton Hotel for McMaster University 9:00am **Invited Session on Classification Methodology** Chair: Cristina Tortora OPTIMIZATION UNDER CONSTRAINTS BY APPLYING ASYMMETRIC ENTROPY MEASURE Hebert Lee, University of California, Santa Cruz UNSUPERVISED LEARNING MIXTURES WITH COVARIATES FROM INCOMPLETE DATA Salvatore Ingrassia, University of Catania 10:30am Coffee Break HH Math Cafe 10:50am **Contributed Session 3** Chair: Stephen France UNSUPERVISED LEARNING VIA MIXTURES OF SKEWED DISTRIBUTIONS WITH HYPERCUBE CONTOURS Brian Franczak, McMaster University MULTIVARIATE STOCHASTIC PROCESS MODELS: JOINT REGRESSION & CLASSIFICATION Tony Pourmohamad, University of California, Santa Cruz GENETIC ALGORITHMS FOR FINDING BRAIN CONNECTIONS WHICH DISTINGUISH DISEASE William Shannon, University of Washington in St. Louis 12:20pm Closing Remarks 12:45pm Shuttle leaves McMaster for Sheraton Hotel