

# The 2024 Classification Society Annual Meeting Program

University of British Columbia – Okanagan, Kelowna, British Columbia, Canada, June 18 – 21, 2024

## Specific locations:

- The welcome reception (June 18) will be at Kelowna Brewing Company, 975 Academy Way.
- Breakfast and Lunch (June 19 & 20) will be served in Administration Building (ADM), Sunroom.
- Presentations will be held in Arts Building, Room 376.
- The poster session will be in Rustic Reel Brewing Company, Beer Hall, 760 Vaughan Ave.
- The Classification Society General Meeting will be held in Arts Building, Room 376.
- The Classification Society board meeting will be held in Arts & Science Centre, Room 301.
- The Journal of Classification editorial board meeting will be held in Arts & Science Centre, Room 301.
- The Banquet (June 20) will be held in Gray Monk Estate Winery, Estate Room, 1055 Camp Rd, Lake Country.

*The Classification Society would like to thank Springer and the Dept of CMPS for support of the meeting.*

## Tuesday, June 18

6:00 - 9:00pm **Welcome Reception/ Registration** (Kelowna Brewing Company)

## Wednesday, June 19

7:00 - 8:00am Registration & Breakfast (ADM Sunroom)

### 8:15am **Opening Remarks**

Lael Parrott, Dean, Irving K. Barber Faculty of Science, UBCO

### 8:30am **President's Invited Address**

Chair: Jeff Andrews

*Functional Nonlinear Learning*

Jiguo Cao

9:30am Coffee Break

### 10:00am **Invited Session 1**

Chair: Tanzy Love

*Clustering EEG Sleep Signals with Topological Hidden Markov Models*

Adam Kashlak

*Model-Based Clustering of Trends and Cycles of Nitrate Concentrations in Rivers Across France*

Matt Heiner

*Is My Brand a Walrus? Visualization and Clustering with Projective Techniques.*

Stephen France

11:30am Lunch Break (ADM Sunroom)

### 12:30pm **2024 Distinguished Dissertation Award Lecture**

Chair: Stephen France

*Methods for the Statistical Analysis of Preferences, with Applications to Social Science Data*

Michael Pearce

*Functional Finite Mixture Models and Estimation*

Alexander Sharp

*Interpretable Structures in Gaussian Mixture Model Parameters*

Jason Hou-Liu

2:00pm Coffee Break

### 2:15pm **Contributed Session 1**

Chair: Mateen Shaikh

*A bootstrap-augmented k-means algorithm for parameter-free fuzzy clustering*

Jesse Ghashti

*Learning Embedding Representations for Deep Clustering*

Yicen Li

*Clustering flow cytometry data via mutual information maximization*

Mackenzie Neal

3:15pm Coffee Break

3:30pm	<p><b>Contributed Session 2</b></p> <p><i>Depth-Based Local Center Clustering: Expanding Data Depth into Flexible Clustering Analysis</i> Siyi Wang</p> <p><i>Unbalanced longitudinal data clustering with a Gaussian copula kernel mixture model</i> Xi Zhang</p> <p><i>Community structure in data</i> Kenneth Berenhaut</p>	Chair: John Thompson
5:00pm	<b>Poster Session</b> - Bus Pickup at Lot E (UBCO) for Rustic Reel	
8:00pm	Social	
8:30pm	Bus pickup 1 at Rustic Reel for return to UBCO and Four Points	
10:30pm	Bus pickup 2 at Rustic Reel for return to UBCO and Four Points	
<b>Thursday, June 20</b>		
7:30 - 8:30am	Registration & Breakfast (ADM Sunroom)	
8:30am	<p><b>Invited Lecture</b></p> <p><i>Hidden semi-Markov models to cluster time-dependant data</i> Antonello Maruotti</p>	Chair: Brian Franczak
9:30am	Coffee Break	
	<b>Journal of Classification editorial board meeting</b> (ASC 301)	
10:00am	<p><b>Invited Session 2</b></p> <p><i>SPMM: Estimating Infection Duration of Multivariate HIV-1 Infections</i> Tanzy Love</p> <p><i>Clustering Spatial Data with a Mixture of Skewed Regression Models</i> Michael Gallagher</p> <p><i>Mixture of t-distributions parsimonious models for clustering functional data</i> Cristina Anton</p>	Chair: Sanjeena Dang
11:30am	Lunch Break (ADM Sunroom)	
	<b>Classification Society Board Meeting</b> (ASC 301)	
1:00pm	<p><b>Invited Lecture</b></p> <p><i>Clustering multivariate counts from modern biological datasets</i> Sanjeena Dang</p>	Chair: Herbie Lee
2:00pm	Coffee Break	
2:15pm	<p><b>Contributed Session 3</b></p> <p><i>A robust logistic-t multinomial mixture model for clustering microbiome data</i> Yuan Fang</p> <p><i>On Discrimination with Multi-level Multivariate Data using Patterned Covariance Structure</i> Anuradha Roy</p> <p><i>Polytomous Cognitive Diagnosis Model</i> Youn Seon Lim</p>	Chair: Michael Gallagher
3:15pm	Coffee Break	
3:30pm	<p><b>Invited Session 3</b></p> <p><i>Selected Themes from Articles Published in the Journal of Classification in 2023</i> Paul McNicholas</p> <p><i>Model-Based Clustering and Classification Using Mixtures of Multivariate Skewed Power Exponential Distributions</i> Utkarsh Dang</p> <p><i>DDCAL: Evenly Distributing Data into Low Variance Clusters Based on Iterative Feature Scaling</i> Marian Lux</p>	Chair: Paul McNicholas
4:45pm	<b>Classification Society General Meeting</b>	
6:00pm	Banquet - Bus pickup at Lot E (UBCO), followed by Four Points	

9:30pm

Bus pickup at Gray Monk for return to Four Points then UBCO