

PHYSICAL SESSION

APPLIED STATISTICS III

Session Chair: Dr. Noelle Samia, Northwestern University, USA

10:55 - 11:10, ICSTA 114 - Big Data and Design of Experiments: a combination which can enhance the performances of Machine Learning Models

Presenter: Alberto Molena, University of Padova, Italy

11:10 - 11:25, ICSTA 111 - Multivariate permutation test for model selection

Presenter: Elena Barzizza, University of Padova, Italy

11:25 - 11:40, ICSTA 123 - Comparison of survival analysis approaches to modelling age at first sex among youth in Kisesa Tanzania

Presenter: Jacqueline Materu, National Institute for Medical Research & Catholic University of Health & Allied Sciences, Tanzania

11:40 - 11:55, ICSTA 166 - Cause-Specific Mortality In Southern Uganda Using Verbal Autopsy 1999-2019

Presenter: Doreen Nabukalu, London School of Hygiene and Tropical Medicine, UK

- All submitted papers will be **peer-reviewed**
- The Conference Proceedings will be published under an **ISSN** and **ISBN number**
- The conference proceedings will be indexed by **Scopus**, **Google Scholar** and **Semantic Scholar**
- Each paper will be assigned a unique **DOI number** by **Crossref**
- The Proceedings will be permanently archived in **Portico** (one of the largest community-supported digital archives in the world).



ICSTA
2023

5TH INTERNATIONAL CONFERENCE ON STATISTICS: THEORY AND APPLICATIONS

3 - 5 August, 2023

Brunel University, London, United Kingdom

PROGRAM



ICSTA 2023 CONFERENCE CHAIRS



Dr. Noelle Samia
Northwestern University, USA
Conference Chair



Dr. Dirk Husmeier
The University of Glasgow, UK
Conference Co-chair



Dr. Jürgen Pilz
University of Klagenfurt, Austria
Local Committee Member

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ROOM 2 - 11:55 AM - 12:55 PM - Lunch Break

PHYSICAL SESSION

COMPUTATIONAL STATISTICS

Session Chair: Dr. Noelle Samia, Northwestern University, USA

01:10 - 01:25, ICSTA 115 - Fuzzy C-Medoids clustering of CUB data to handle Likert-type scales uncertainty

Presenter: Luigi Salmaso, University of Padova, Italy

01:25 - 01:40, ICSTA 118 - Product quality control forecast using Machine Learning algorithms: a case study

Presenter: Riccardo Ceccato, University of Padova, Italy

01:40 - 01:55, ICSTA 153 - Bayesian model selection and emulation for protein fluorescence

Presenter: William Ryan, University of Glasgow, UK

01:55 - 02:10, ICSTA 150 - FReET: Software for Uncertainties Propagation

Presenter: Drahomír Novák, Brno University of Technology, Czech Republic

Next Conference:

6th International Conference on Statistics: Theory and Applications (ICSTA 2024)

Berlin, Germany
August, 2024



ICSTA'23 Program



ICSTA'23 Proceedings

ROOM 2 - 07:00 PM - 09:00 PM - Gala Dinner

10:55 AM -
11:55 PM

12:55 PM -
02:10 PM

DAY 1 (THURSDAY) - August 03, 2023

09:00 AM - 10:30 AM

Virtual Session
Applied Statistics I

DAY 2 (FRIDAY) - August 04, 2023

08:00 AM - 09:00 AM

Registration

09:00 AM - 09:15 AM

Official Opening

Dr. Noelle Samia, Northwestern University, USA

09:15 AM - 10:00 AM

ICSTA 2023 KEYNOTE LECTURE - VIRTUAL

Deep Kernel Learning based Gaussian Processes for Bayesian Image Regression Analysis

Dr. Jian Kang, University of Michigan, USA

10:00 AM - 10:45 AM

ICSTA 2023 KEYNOTE LECTURE - VIRTUAL
Understanding How Dimension Reduction Tools Work

Dr. Cynthia Rudin, Duke University, USA

ROOM 2 - 10:45 AM - 11:05 AM - Coffee Break

11:05 AM - 11:50 AM

PHYSICAL SESSION
STATISTICAL METHODOLOGY

Session Chair: Dr. Noelle Samia, Northwestern University, USA

11:05 - 11:20, ICSTA 148 - Variable selection for a contaminated mixture of normals classification model

Presenter: Jorge Alfredo Sanchez, University of Glasgow, UK

11:20 - 11:35, ICSTA 134 - Covariance Estimators for the ROOT-SGD Algorithm in Online Learning

Presenter: Xiaoming Huo, Georgia Institute of Technology, USA

11:35 - 11:50, ICSTA 142 - High dimensional change points: challenges and some proposals

Presenter: Lupeng Zhang, Durham University, UK

12:55 - 01:10, ICSTA 122 - Scalable simulations of 3D turbulence fine structure in nanoflare using a novel plasma statistical algorithm

Presenter: Bojing Zhu, University of Chinese Academy of Sciences, China

PHYSICAL SESSION

MEDICAL STATISTICS

Session Chair: Dr. Noelle Samia, Northwestern University, USA

11:50 - 12:05, ICSTA 149 - Bayesian inference of cardiac models emulated with a time series Gaussian process

Presenter: Yuzhang Ge, University of Glasgow, UK

12:05 - 12:20, ICSTA 143 - PRECISION-LVAD: A personalized algorithm to detect cardiac arrhythmia and major bleeding in advanced heart failure patients

Presenter: Mehran Moazeni, Utrecht University, Netherlands

12:20 - 12:35, ICSTA 156 - Estimating the prevalence of severe psychiatric disorders among underages in Italy using capture-recapture methods

Presenter: Danilo Alunni Fegatelli, Sapienza University of Rome, Italy

11:50 AM - 12:35 PM

ROOM 2

12:35 PM - 12:40 PM - Group Photo

12:40 PM - 01:40 PM - Lunch Break

01:40 PM - 02:25 PM

ICSTA 2023 KEYNOTE LECTURE - VIRTUAL
Stochastic Environmental Modeling in a Time of Convergence: Physics Meets Artificial Intelligence

Dr. Stefano Castruccio, University of Notre Dame, USA

PHYSICAL SESSION

TIME-SERIES ANALYSIS

Session Chair: Dr. Dirk Husmeier, The University of Glasgow, UK

02:25 - 02:40, ICSTA 112 - Diagonal Vector Autoregressive Models And Their Properties

Presenter: Anthony Usoro, Akwa Ibom State University, Nigeria

02:40 - 02:55, ICSTA 124 - Fisher-Shannon analysis of time series of MODIS Terra evapotranspiration satellite data of vegetation: a method to reveal status of plant infection

Presenter: Luciano Telesca, Institute of Methodologies for Environmental Analysis, National Research Council, Italy

02:55 - 03:10, ICSTA 158 - Short and Long-term Forecasting of Emerging Market Data using ARIMA-based and Boosting Machine Learning Algorithms

Presenter: Md Al Masun Bhuiyan, Austin Peay State University, USA

02:25 AM - 03:10 PM

03:10 PM - 03:30 PM - Coffee Break

DAY 3 (SATURDAY) - August 05, 2023

09:00 AM - 09:50 AM

ICSTA 2023 PLENARY LECTURE - VIRTUAL

Sex-Biased Genome Evolution

Dr. Melissa Wilson, Arizona State University, USA

09:50 AM - 10:35 AM

PHYSICAL SESSION
APPLIED STATISTICS II

Session Chair: Dr. Dirk Husmeier, The University of Glasgow, UK

09:50 - 10:05, ICSTA 104 - Statistics Anxiety: What are the antecedents?

Presenter: Milica M. Maričić, University of Belgrade, Serbia

10:05 - 10:20, ICSTA 133 - Using indicators of entrepreneurial ecosystem quality for segmenting countries: A biclustering approach

Presenter: Teodora Rajkovic, University of Belgrade, Serbia

10:20 - 10:35, ICSTA 108 - An Overview of Statistical Models in High Throughput Screening (HTS) for Toxicity Data

Presenter: Mehdi Razzaghi, Commonwealth University of Pennsylvania, USA

10:35 AM - 10:55 AM

Coffee Break

POSTERS SESSION

Session Chair: Dr. Dirk Husmeier, The University of Glasgow, UK

10:35 AM - 10:55 AM, ICSTA 154 - Development of a Hospital Frailty Risk Score for Community-dwelling Older Adults Using Data from Electronic Hospital Records in South Korea

Presenter: Heesun Kim, National Evidence-Based Collaborating Agency & Jinhee Kim, Chosun University, South Korea