



PROGRAMME

SYMBOLIC DATA ANALYSIS WORKSHOP 2025 SDA 2025

EVENT DATE:

MONDAY – JUNE 9, 2025 to **WEDNESDAY – JUNE 11, 2025**

Monday – June 9, 2025

08:30	Registration
09:15	Participants Welcome
09:30 – 11:00	Tutorial (+ online) <i>Chair: Jasminka Dobša</i> Symbolic Data Analysis – Why, How, What for? <i>Paula Brito</i>
11:00 – 11:30	Coffee break
11:30 – 13:00	Software Presentations (+ online) <i>Chair: Renata M. C. R. de Souza</i>
11:30 – 12:00	The RSDA Package <i>Oldemar Rodríguez</i>
12:00 – 12:30	R Package MAINT.Data <i>Pedro Duarte Silva</i>
12:30 – 13:00	HistDAWass: an R Package for the Exploratory Analysis of Histogram Data <i>Antonio Irpino</i>
13:00 – 14:15	Lunch break
14:15 – 14:30	Workshop Opening
14:30 – 16:30	Session I: Foundations of SDA and Statistical Modelling I <i>Chair: Lynne Billard</i>
14:30 – 15:00	File Representations of Symbolic Data for Open Science <i>Vladimir Batagelj</i>
15:00 – 15:30	Central Limit Theorem for a Set-valued Martingale <i>Andrej Srakar</i>
15:30 – 16:00	Multiblock Analysis of Distributional Data <i>Paula Brito, Ndeye Niang, A. Pedro Duarte Silva, Stephanie Bougeard</i>

16:00 – 16:30	Geometric Goodness-of-fit Measure for Interval-valued Data <i>Dylan Benavides, Oldemar Rodríguez, Maikol Solis</i>
16:30 – 17:00	Coffee break
17:00 – 18:00	Session II: Dimensionality Reduction <i>Chair: M. Rosário Oliveira</i>
17:00 – 17:30	Riemannian Principal Component Analysis for Interval-valued Data <i>Oldemar Rodríguez</i>
17:30 – 18:00	Principal Component Analysis of Distributional Data <i>Sonia Dias, Paula Brito</i>
18:15 – 20:00	Local Guided Tour of the City of Varaždin
20:00 – 22:00	Dinner at Restaurant of the Park Boutique Hotel

Tuesday – June 10, 2025

09:00 – 11:00	Session III: Foundations of SDA and Statistical Modelling II <i>Chair: Vladimir Batagelj</i>
09:00 – 09:30	An Extension of Entropy for Interval-valued Data <i>Jose Andres, Piedra Molina, Oldemar Rodríguez Rojas</i>
09:30 – 10:00	Advancements in the Best Point Method: New Optimization Criteria <i>Mario J. Gomez, Jorge Arce, Oldemar Rodríguez</i>
10:00 – 10:30	Symbolic Data as Matrix-valued Data Robust Estimation and Explainable Outlier Detection <i>Marcus Mayrhofer, Paula Brito, A. Pedro Duarte Silva, Peter Filzmoser</i>
10:30 – 11:00	Explainable Outlier Detection in Interval-valued Data Using a Robust Covariance Estimator <i>Catarina P. Loureiro, M. Rosário Oliveira, Paula Brito, Lina Oliveira</i>
11:00 – 11:30	Coffee break
11:30 – 13:00	Session IV: Clustering <i>Chair: Simona Korenjak-Černe</i>
11:30 – 12:00	Clustering Density-valued Data <i>Rui Nunes, Paula Brito, Sonia Dias</i>
12:00 – 12:30	Clustering Intervals Using Principal Components <i>Jiankun Zhu, Lynne Billard</i>

12:30 – 13:00	Clustering Distributional Data Using Mahalanobis-like Distance on LDQ Functions <i>Gianmarco Borrata, Rosanna Verde, Antonio Balzanella</i>
13:00 – 14:30	Lunch break
14:30 – 15:30	Panel Discussion <i>Moderator: Jasminka Dobša</i> New Horizons in Official Statistics: Techniques, Tools, and Chalanges <i>Ivana Levačić, Jure Dubravčić, Boris Berenček, Paula Brito, Oldemar Rodríguez</i>
16:00 – 22:00	Excursion and Dinner Local Guided Tour Followed by Dinner in Međimurje County

Wednesday – June 11, 2025

09:00 – 10:30	Session V: Regression <i>Chair: Sonia Dias</i>
09:00 – 09:30	From Ordinary Least Squares to Robust Methods: Revisiting Regression for Interval-valued Variables <i>M. Rosário Oliveira, Conceição Amado</i>
09:30 – 10:00	Integrating Centre and Range Methods in Symbolic Regression Trees <i>Priscilla Angulo, Oldemar Rodríguez</i>
10:00 – 10:30	Regression Models with Sentiment Analysis Integration for Interval-valued Data <i>Daniela Sevilla, Oldemar Rodríguez</i>
10:30 – 11:00	Coffee break
11:00 – 12:00	Session VI: Supervised Learning <i>Chair: Pedro Duarte Silva</i>
11:00 – 11:30	A New Discriminant Analysis Approach for Density-valued Data Classification <i>Francesca Condino, Paula Brito</i>
11:30 – 12:00	Stacked Logistic Regression for Interval Data Classification <i>Rafaella L. S. do Nascimento, Renata M. C. R. de Souza, Francisco José A. Cysneiros</i>

12:00 – 13:00 Session VII: Applications of SDA

Chair: Oldemar Rodríguez

12:00 – 12:30 LIMOS - LightGBM Interval Merton's One-period-portfolio Selection

Liang-Ching Lin

12:30 – 13:00 Symbolic Data Analysis Approach to Identify Adolescent Profiles Based on
Momentary Self-assessments and the Use of Internet Applications

Jasminka Dobša, Simona Korenjak-Černe, Miranda Novak, Maja Buhin Pandur

13:00 – 13:30 Closing

Summary, Announcements, Feedback

13:30 – 15:00 Lunch