Timetable

Aula VIII, Department of Mathematics – University of Bari "Aldo Moro"
20 - 22 September 2023
https://primo2023.uniba.it
primoworkshop2023@gmail.com

Wednesday, 20 September

8:30 - 9:00	**Registration**	
9:00 - 9:45	**Welcome remarks & Introduction** Nicoletta Del Buono and Flavia Esposito Anna Maria Candela - *Head of Dept. of Mathematics* Francesca Mazzia - *Ph.D. Coordinator* Vito Palasciano and Gabriele Pece - *Pirelli S.p.A* Antonio De Girolamo - *Fincons Group*	
9:45 – 10:10	Antoine Chatalic	Nyström Kernel Quadratures
10:10 - 10:35	Marco Letizia	Efficient kernel methods for statistical hypothesis testing
10:35 – 11:15	Salvatore Cuomo	**Keynote Lecture** A Novel Computational Paradigm for approximation, data analysis and representation: the Scientific Machine Learning
11:15 – 11:45	Coffee break	
11:45 – 12:10	Cesare Molinari	Learning from data with via overparametrization
12:10 – 12:35	Francesco Triggiano	Gaussian processes based data augmentation and expected signature for time series classification
12:45 – 14:00	Lunch break	
14:00 - 14:25	Tea Tavanxhiu	Operational research and machine learning to optimize the performance of route optimization and customer satisfaction in logistics - A case study
14:25 - 14:45		Poster pitch
14:45 - 15:00	Nicola Procopio Nicolò Marziale	FINCONS GROUP How to boost your Industry-Specific Application with A.I.
15:00 – 15:15	Elena Di Lascio Nicola Melas	PIRELLI Virtualizing Tyre Design: A Neural Network Approach to Predicting Noise Emission
15:15 - 16:00	Coffee break & Poster session	
16:00 – 16:25	Cristiano Tamborrino	Exploiting Copulas Families and empirical density estimation with Spline Quasi-Interpolation for Unsupervised Classification
16:25 - 16:50	Stella de Biase	Improving Classification Trustworthiness in Random Forest

Thursday, 21 September

9:30 - 9:55	Arturo De Marinis	Training of stable neural ordinary differential equations
9:55 - 10:20	Alessandro Scagliotti	AutoencODEs: an extension of NeurODEs for width-varying Neural Networks
10:20 – 11:05	Nicolas Gillis	**Keynote Lecture** Nonnegative Matrix Factorization and beyond
11:05 – 11:35	Coffee break	
11:35 - 12:00	Stefano Sicilia	A low rank ODE for spectral clustering stability
12:00 - 12:25	Miryam Gnazzo	Computing closest singular matrix-valued functions
12:45 - 14:00	Lunch break	
14:00 - 14:25	Antonella Falini	A phase unwrapping technique based on Approximated Iterative QLP decomposition
14:25 - 14:50	Veronica Buttaro	Dimensionality reduction techniques for the analysis of human microbiome data
14:50 – 15:20	Coffee break	
15:20 – 15:45	Roberta De Fazio	Machine Learning algorithms comparison: An application on amino acids volume prediction
15:45 - 16:10	Noemi Montobbio	Quantification of granular sparkling at echocardiography in patients with transthyretin-related cardiac amyloidosis using radiomic and mathematical morphology features
16:10 - 16:35	Rosanna Turrisi	Addressing data challenges in Machine Learning for Medicine
19:00	Social walk in Bari old town	
20:00	Social dinner @ Terranima restaurant	

Group Photo: Sept. 21 @ 12:30 Meeting point: Department entrance
Social Walk: Sept. 21, Meeting point @ Info Point Bari, Piazza del Ferrarese, 29
Social Dinner: Sept. 21 @ Terranima Ristorante, Via Nicolò Putignani, 213

Friday, 22 September

9:30 - 9:55	Marco Berardi	Kalman filters for estimating hydraulic parameters
9:55 - 10:20	Agnese Pacifico	Online identification and control of PDEs via Reinforcement Learning methods
10:20 – 11:05	Stefania Bellavia	**Keynote Lecture** Matrix Completion: Optimization Methods and Applications
11:05 – 11:35	Coffee break	
11:35 - 12:00	Mattia Silei	Alternating Projections for Matrix Completion
12:00 - 12:25	Greta Malaspina	3d Nesting for Autologous Ear Reconstruction: a global optimization approach
12:25 – 12:35	Closing	

POSTER

Paolo Didier Alfano	Efficient datasets distance measure
Serena De Benedictis	Topological Machine Learning and industrial applications
Grazia Gargano	An NMF-based approach to identify differentially expressed genes in microarray and RNA-seq data
David Katz	Hypermatrix Analysis of Hi-C Data
Bernard Opoku	Mathematical Modelling of Transmission Dynamics and Optimal Control of Meningitis Serogroup A and C in Ghana
Laura Selicato	Penalty Hyperparameters Optimization in Non-negative Matrix Factorization problems