



3rd AIROYoung Workshop and 1st PhD School

on ADVANCED METHODS IN OPTIMIZATION AND DATA SCIENCE

STATISTICAL DEPARTMENT OF SAPIENZA UNIVERSITY OF ROME
 AULA GINI – AULA 1, GROUND FLOOR (DAY 1)
 RECTORATE BUILDING OF SAPIENZA UNIVERSITY OF ROME
 AULA DEGLI ORGANI COLLEGIALI, GROUND FLOOR (DAYS 2 3 4)

TUE 26 MARCH 2019	
13:00-14:00	REGISTRATION
14:00-14:30	OPENING SESSION
14:30-16:00	TUTORIAL I Lavinia Amorosi, Sapienza University of Rome “A practical introduction to Bensolve and Polyscip for multicriteria linear optimization”
16:00-16:30	Coffee break
16:30-18:00	TUTORIAL II Nicola Gastaldon, University of Padova and Trans-cel “Exposing C++ classes to Python”
18:00 -19:00	AIROYoung MEETING
WED 27 MARCH 2019	
09:00-10:30	TUTORIAL III Jamie Fairbrother, CENTRAL, Lancaster University “Introduction to Julia: a modern programming language for Operational Research”
10:30-11:00	Coffee break
11:00-12:30	TUTORIAL IV Mathieu Tanneau, GERAD, Montréal “From math to code”
12:30-14:00	Lunch break
14:00-16:00	INVITED LECTURE I Teodor Crainic, School of Management, Université du Quebec, Montréal “Parallel Meta-heuristics for Combinatorial Optimization with Applications to Network Design and Routing”
16:00-16:30	Coffee break
16:30-18:30	INVITED LECTURE I Teodor Crainic, School of Management, Université du Quebec, Montréal “Parallel Meta-heuristics for Combinatorial Optimization with Applications to Network Design and Routing”
20:00-21:30	VILLA FARNESINA GUIDED TOUR (meeting 18:50 P.le Aldo Moro – Sapienza entrance)

THU 28 MARCH 2019

09:00-11:00	INVITED LECTURE II Endre Boros, Rutgers University, New Jersey “Partially defined Boolean functions and logical analysis of data: what is ethical machine learning?”	
11:00-11:30	Coffee break	
11:30-13:30	INVITED LECTURE II Endre Boros, Rutgers University, New Jersey “Partially defined Boolean functions and logical analysis of data: what is ethical machine learning?”	
13:30-14:30	Lunch break (provided by AIROYoung)	
14:30-15:30	PLENARY I Laura Palagi, Sapienza University of Rome “Optimization issues in Deep Learning”	
5min ca	SPONSOR PITCH Daniele Vigo, AIRO President and OPTIT	
15:30-16:10	Seminars Session “OR practical applications”	
	15:30-15:50	Matteo Cosmi “Scheduling for Last-Mile Food Delivery”
	15:50-16:10	Veronica Dal Sasso “Deadlock detection and safe places in railways: a dispatcher’s enigma”
16:10-16:40	Coffee break	
16:40-17:40	SEMINARS SESSION “Mathematical programming modellization and algorithms”	
	16:40-17:00	Michele Barbato “Monopolar Graphs: Complexity of Computing Classical Graph Parameters”
	17:00-17:20	Nicolò Gusmeroli “An Exact Penalty Method over Discrete Sets”
	17:20-17:40	Torkil Kollsker “An Adaptive Large Neighborhood Search for Optimizing the LEGO Construction Problem”
17:40-18:40	SEMINARS SESSION “Machine Learning and Data Science-based approaches”	
	17:40-18:00	Saverio Basso “Computational evaluation of data driven local search for MIP decompositions”
	18:00-18:20	Marco Boresta “Image recognition for quality control”
	18:20-18:40	Daniele Ferone “A personalized smart tourism recommender system based on social media data”
20:00-late	SOCIAL DINNER	
FRI 29 MARCH 2019		
09:00-10:00	PLENARY II Paolo Dell’Olmo, Sapienza University of Rome “Mathematical Programming Models for Optimal Aggregation of Multi-Agent Preferences”	
5min ca	SPONSOR PITCH Martina Fischetti, Vattenfall	
10:00-11:00	SEMINARS SESSION “Challenges in Logistics and Transportation”	
	10:00-10:20	Stefano Bortolomol “Modelling competitive markets within a demand-based optimization framework”
	10:20-10:40	Annarita De Maio “A matheuristic approach for the Multi-Attribute Inventory Routing Problem”
	10:40-11:00	Riccardo Giusti “Sychromodal Freight Transportation and Logistics: from state-of-the-art to applications”
11:00-11:30	Coffee break	

11:30-13:30		SEMINARS SESSION "Challenges in Logistics and Transportation"
	11:30-11:50	Alessandro Gobbi "Optimizing the Nurse Routing Problem with incompatible services"
	11:50-12:10	Diana L. Huerta-Muñoz "A Kernel Search Heuristic for CVaR optimization: The Facility Location Problem"
	12:10-12:30	David Koza "Integrated Liner Shipping Network Design and Scheduling, or: Solving a large service network design problem"
	12:30-12:50	Giusy Macrina "The green mixed fleet vehicle routing problem with partial battery recharging and time windows"
	12:50-13:10	Daniele Manerba "A deterministic approximation for the stochastic multi-path Traveling Salesman Problem with dependent random travel costs"
	13:10-13:30	Andrea Mor "Dynamic traveling salesman problem with stochastic release dates"
13:30-14:00		CLOSING

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