

# 4th AIROYoung Workshop

# New Advances in Optimization, Machine Learning and Data Science

Free University of Bozen-Bolzano

Room BZ D1.02

WED 5 FEBRUARY 2020		
12.30 – 14.00	REGISTRATION	
14.00 – 14.30	OPENING SESSION	
14.30 – 16.00	SESSION "Challenges in Maritime Applications"	
	14.30 – 15.00	<u>David Franz Koza</u> "Disruptions in large container shipping networks: How Operations Research can help to get container vessels back on schedule and minimize impact on cargo"
	15.00 – 15.30	<u>Jia Beizhen</u> "Optimal Dual Cycling Operations in Short-Sea RoRo Terminals"
	15.30 – 16.00	<u>David Sacramento Lechado</u> "Constraint Programming and Local Search Heuristic: A Matheuristic Approach for solving the Port Scheduling Problem"
16.00 – 18.00	BOZEN GUIDED TOUR	

THU 6 FEBRUARY 2020			
8.30 – 10.30	SESSION "Challenges in Public Transportation and Graph Coloring"		
	8.30 – 9.00	Emine Akyol Ozer "A Mathematical Model and A Genetic Algorithm based Matheuristic Algorithm for Train Platforming Problem"	
	9.00 – 9.30	<u>Nathalie Friess</u> "Full Decarbonisation of an Urban Public Transport Bus System"	
	9.30 – 10.00	<u>Marta Leonina Tessitore</u> "Combining Simulation and Optimization for Traffic Disturbance Recovery in a Busy Metro System"	

	10.00 – 10.30	<u>Luca Ferrarini</u> "Petersen and Sylvester colorings of cubic
		graphs"
10.30 – 11.00	COFFEE BREAK	
11.00 – 12.00		ESSION "Challenges in Energy Applications"
	11.00 - 11.30	<u>Davide Cazzaro</u> "Heuristic Algorithms for the Wind Farm
		Cable Routing Problem"
	11.30 – 12.00	Giovanni Micheli "A two-stage stochastic MILP model for
		Generation and Transmission Expansion Planning with
		High Shares of Renewables"
12.00 – 13.00	PLENARY 1 "Routing Problems in Last-Mile Delivery Services"	
	Claudia Archetti	
13.00 – 13.10		SPONSOR PITCH OPTIT
13.10 – 14.30	LUNCH	
14.30 – 15.00	SPECIAL SESSION "Building bridges between Operations Research and	
	Data Science'' Tullia Padellini	
<b>15.00 – 17.00</b>	S	ESSION "Optimization meets Data Science"
	15.00 – 15.30	<u>Davide Cacciarelli</u> "Machine Learning algorithms for predicting donor responses to direct marketing campaigns"
	15.30 – 16.00	Alberto Santini "Exact, Heuristic and Machine Learning
		Approaches to The Probabilistic Travelling Salesman Problem with Crowdsourcing"
	16.00 – 16.30	<u>Diego Maria Pinto</u> "REMIND – Reverse Manufacturing
		Innovation Decision Systems"
	16.30 – 17.00	Marco Boresta "Filtering with a Gaussian kernel for the
		gradient estimation of a noisy function"
17.00 – 18.00	AIROYoung ANNUAL MEETING + COFFEE BREAK	
19.00 - Late		SOCIAL DINNER

FRI 7 FEBRUARY 2020		
8.30 – 10.30	SESSION "Challenges in Last-mile Delivery and Transshipment	
	problems"	
	8.30 - 9.00	Giusy Macrina "Crowd-shipping with time windows and
		transshipment nodes"
	9.00 - 9.30	Matteo Cosmi "Food Delivery and Last-Mile Optimization:
		Improving the QoS allowing bundles"
	9.30 - 10.00	Katarzyna Gdowska "A simulation model for last-mile
		delivery with crowdshipping"
	10.00 - 10.30	Riccardo Giusti "Progressive Hedging Heuristics for the
		Transshipment Location-Allocation Problem in
		Synchromodal Logistics"
10.30 – 11.00	COFFEE BREAK	
11.00 – 12.00	SESSION "Challenges in Routing"	

	11.00 – 11.30	Annarita De Maio "A Variable Neighborhood Search for
	11.00 – 11.50	the Multi-Attribute Inventory Routing Problem"
		,
	11.30 - 12.00	<u>Valerio Dose</u> "The price of anarchy as a function of the
		demand: how the amount of traffic affects the efficiency
		of selfish routing"
12.00 – 13.00	PLENARY 2 "Optimization Problems in Airport Baggage Handling"	
	David Pisinger	
13.00 – 14.30	LUNCH	
14.30 – 15.30	HIGHLIGHT SESSION: Pitch talks for 1st year PhD students	
<b>15.30 – 16.00</b>	COFFEE BREAK	
16.00 – 17.30	SESSION "Challenges in Production Management and Social Learning"	
	16.00 – 16.30	Julia Resch "Optimally rescheduling jobs under a Last-In-
		First-Out constraint"
	16 30 – 17 00	Anne-Laurence Thoux "An Iterative Approach for the
	20.00 27.00	Mobile Workforce Tactical Scheduling Problem with
		Frequency Constraints"
	17.00 - 17.30	Stefano Vaccari "Social Learning with Product Choice"
17.30 – 18.00	CLOSING SESSION	









## **ACCOMODATION**

Since Bozen-Bolzano is a popular travel destination, you are spoilt for choice. You can find 5 star hotels, guest houses, youth hostels, B&B's and holiday apartments. There is a wide range of accommodation to choose from.

The following hotels are near the Free University of Bozen-Bolzano:

### Stadthotel - Hotel Città \*\*\*

Waltherplatz 21 Piazza Walther I-39100 Bozen Bolzano Tel. +39 0471 975221 Fax +39 0471 976688 E-Mail info@hotelcitta.info

### www.hotelcitta.info

**Hotel Feichter** \*\*

Weintraubengasse 15 Via Grappoli

I-39100 Bozen Bolzano Tel. +39 0471 978768 Fax +39 0471 974803

E-Mail info@hotelfeichter.it

www.hotelfeichter.it

Hotel Scala Stiegl \*\*\*\*

Brennerstraße 11 Via Brennero

I-39100 Bozen Bolzano Tel. +39 0471 976222 Fax +39 0471 981141

E-Mail <u>info@scalahot.com</u>

www.scalahot.com

#### Parkhotel Laurin \*\*\*\*

Laurinstraße 4 via Laurino I-39100 Bozen Bolzano Tel. +39 0471 311000 Fax +39 0471 311148 E-Mail info@laurin.it

# www.laurin.it Hotel Figl \*\*\*

Kornplatz 9 Piazza del grano I-39100 Bozen Bolzano Tel. +39 0471 978412 Fax +39 0471 978413

E-Mail info@figl.net

www.figl.net

### Parkhotel Luna Mondschein \*\*\*\*

Piavestraße 15 via Piave I-39100 Bozen Bolzano Tel. +39 0471 975642 Fax +39 0471 975577 E-Mail info@hotel-luna.it

www.hotel-luna.it

Hotel Greif \*\*\*\*

Waltherplatz – piazza Walther I-39100 Bozen Bolzano Tel. +39 0471 318000 Fax +39 0471 318148 E-Mail info@greif.it

www.greif.it

# Here you will find some useful links for room booking:

Tourist office Bozen-Bolzano
Booking Bolzano
Booking South Tyrol
Home to Go Bolzano
Airbnb Bolzano

We recommend to book your accommodation as early as possible.

**Further information:** Please contact the tourist board for any further information: +39 0471 307000 or send an email to <u>info@bolzano-bozen.it</u>

### TRAVEL INFORMATION

The conference will take place in the city center, that is car-free. If you cannot avoid flying to attend the conference, you could consider to <u>compensate the CO2 equivalent</u>.

**Here** you can find useful information for reaching the conference venue.

### **BY TRAIN**

Direct trains to Bolzano (IC and EC): Trenitalia, ÖBB and DB

The train station of Bolzano lies in the center of the city, a 10 -minutes' walk by foot to unibz. Bozen-Bolzano can be easily reached using the <u>Italian</u> and <u>Austrian</u> railways. Travelling time by train from:

Rome – Bolzano: 6 hours
 Milan – Bolzano: 3.5 hours
 Verona – Bolzano: 1.5 hours
 Venice – Bolzano: 3 hours

Innsbruck (A) – Bolzano: 2 hours
 Munich (DE) – Bolzano: 4 hours

#### **BY AIR**

For national and international flights you may consider the airports of Verona, Innsbruck, Munich, Milano Orio al Serio, Milano (Linate and Malpensa), Bologna or Venice.

