



## About

We are pleased to invite you at the Third AIROYoung Workshop and the First AIROYoung PhD School, on the topic «Advanced Methods in Optimisation and Data Science».

[AIROYoung](#) is the youth chapter of [AIRO](#), the Italian Operational Research Society. Its aim is to foster collaboration between students and early-career researchers interested in the field of OR, and to provide them with new opportunities to advance their career and expand their network. It also strives to connect the demand and the offer in the OR job market, both in academia and in the industry.

The AIROYoung Workshop, now at its third edition, has become an annual international occasion for PhD students and Young Researchers to meet, exchange knowledge and present novel research contributions in the field of Operational Research and Decision and Data Science. For the next event, we organised an additional three-days PhD School with theoretical classes and lab sessions on cutting-edge topics arising in Optimization and Simulation.

**AIRO**  
**YOUNG**

## Key facts

- **When?** 26-29 March 2019. From Tuesday to Friday, but you are welcome to stay for the weekend. 😊
- **Where?** Sapienza University of Rome. Department of Statistics. Rome: no need to add anything. 🏠
- **What's the fee?** 0€. Nothing. The school and the workshop are totally free. You can thank us (and our generous sponsors) with a handshake. 🤝
- This is a **plastic-free** event and, indeed, the first plastic-free initiative held at Rome La Sapienza University. Young and sustainable! 🌱

📍 <https://www.openstreetmap.org/export/embed.html?bbox=12.5127249956131%2C41.90257249681664%2C12.516168951988222%2C41.90653905888407&layer=mapnik>

## Organising Committee

- Lavinia Amorosi, Sapienza University of Rome
- Martina Fischetti, Vattenfall
- Veronica dal Sasso, Optrail
- Tommaso Pastore, University of Naples Federico II
- Anna Melchiori, IAC-CNR
- Alberto Santini, Universitat Pompeu Fabra

## Sponsors and Acknowledgements

We wish to thank the following organisations and people. It's thanks to them that we were able to organise this workshop and keep it free for everyone.



SAPIENZA  
UNIVERSITÀ DI ROMA

The [Department of Statistics](#) of the Sapienza University of Rome is going to be our host for the second time in our brief history. We wish to thank, in particular, [Paolo Dell'Olmo](#) and [Lavinia Amorosi](#) for their fundamental contributions.



ASSOCIAZIONE ITALIANA DI RICERCA OPERATIVA

This event wouldn't have been possible without the support of our national society, [AIRO Associazione Italiana di Ricerca Operativa](#).

Optit Logo

A big thank goes to [Tiziano Parriani](#) and [Matteo Pozzi](#) of Optit for having donated their prize for the Best Application Paper Award

(ODS 2017 conference) to AIROYoung.



We wish to thank [Martina Fischetti](#) of Vattenfall Vindkraft for having donated her prize for the Best Application Paper Award (ODS 2018 conference) to AIROYoung.



We are thankful to [Optrail](#) for their generous contribution towards sponsoring this event.



We would like to thank [Actor](#), a spin-off of Sapienza University of Rome, for their generous contribution.



We would like to thank the many organisations involved in O.R. in Montreal for sponsoring the participation of one of their students and the organisation of a tutorial.

## PhD School

The AIROYoung PhD School will feature the following two international lecturers:

- **Teodor Crainic**, Professor of Operations Research at the School of Management, Université du Quebec, Montréal. Topic: *Parallel Meta-heuristics for Combinatorial Optimization with Applications to Network Design and Routing*.
- **Endre Boros**, Distinguished Professor of Operations Research at Rutgers University, New Jersey. Topic: *Partially defined Boolean functions and logical analysis of data: what is ethical machine learning?*

We are also organising four invited tutorials:

- **Lavinia Amorosi**, Post-doc at the Sapienza University of Rome. *A practical introduction to Bensolve and Polyscip for multicriteria linear optimization*.
- **Jamie Fairbrother**, Postdoc at the Centre for Transportation and Logistics (CENTRAL), Lancaster University. *Introduction to Julia: a modern programming language for Operational Research*.
- **Nicola Gastaldon**, Industrial PhD student at Padova University and Trans-cel. *Exposing C++ classes to Python*.
- **Mathieu Tanneau**, PhD student at GERRAD, Montreal, Canada. *From math to code*.

## Workshop

The two invited speakers for the AIROYoung Workshop are:

- **Paolo Dell'Olmo**, Full Professor of Operations Research at Sapienza University of Rome. *Mathematical Programming Models for Optimal Aggregation of Multi-Agent Preferences.*
- **Laura Palagi**, Associate Professor of Operations Research at Sapienza University of Rome. *Optimization issues in Deep Learning.*

## Programme

Download the [complete programme in PDF!](#)

### First day of School

26 March	
Lunchtime	Registration
Afternoon	Tutorial 1
	Coffee break
	Tutorial 2

### Second day of School

27 March	
Morning	Tutorial 3
	Coffee break
	Tutorial 4
Afternoon	Lecture 1
	Coffee break
	Lecture 2

### First day of Workshop

28 March	
Morning	Lecture 2
	Coffee break
	Lecture 2
Afternoon	Plenary 1
	Workshop
	Coffee break
	Workshop

### Second day of Workshop

29 March	
Morning	Plenary 2

29 March

Coffee break

Workshop

Afternoon

AIROYoung Meeting

## Travel and Accommodation

### How to get to the Department of Statistics

The Department of Statistics is located within the Sapienza University Campus (main entrance in Piazzale Aldo Moro 5). The building hosting the PhD school and the workshop corresponds to the red pin in the map below.

Dipartimento di scienze Statistiche ☆

Questa mappa è stata creata con Google My Maps. Crea la tua mappa.



Dati mappa ©2022 Google Termini 200 m

### How to get to Rome: by air





There are two main airports in Rome: Roma Fiumicino International Airport and Roma Ciampino low cost airport. Both are located outside the city, about 45 minutes away from the city centre.

To get from Fiumicino International Airport to Sapienza University Campus you have three options, sorted by increasing price:

Type	Service	Description	Price €	Time ⌚
🚌	Bus to Roma Termini Station	Several buses run directly from Fiumicino International Airport to Roma Termini Station. These include buses run by <a href="#">SIT</a> , and <a href="#">Terravision</a> . From the Station to the University you can either walk (15 minutes) or take a taxi (circa 8 euros).	Around 5 euros	About 30 minutes
🚆	Shuttle Train to Roma Termini Station	There is a direct train (Leonardo Express) from Fiumicino International Airport to Roma Termini Station. <a href="#">More info</a> . From the Station to the University you can either walk (15 minutes) or take a taxi (circa 8 euros).	14 euros	Around 30 minutes
🚗	Taxi to the University	You can find official taxi stands outside all terminals. Make sure to only use official taxis, clearly marked by a bright TAXI sign.	Fixed one-way fare: 50 euros	30-45 minutes

To get from Ciampino Airport to Sapienza University Campus you have four options, sorted by increasing price:

Type	Service	Description	Price €	Time ⌚
🚌 + 🚇	Bus to Cinecittà station, then Metro	Take <a href="#">ATAC</a> city bus line 520 to Cinecittà metro station. From there, use metro line A to get to Roma Termini Station. From the Station to the University you can either walk (15 minutes) or take a taxi (circa 8 euros).	1.50 euros, single ticket for both bus and metro	Around 45 minutes
🚌 + 🚆	Bus to Ciampino Train Station, then Train	Metropolitan Train line 6 runs from Ciampino railway station to Roma Termini station. You can get to Ciampino's station by bus; the service is run by <a href="#">ATRAL</a> . From the Station to the University you can either walk (15 minutes) or take a taxi (circa 8 euros).	1.30 euros for the bus + 1.50 euros for the train	Around 30 minutes

Type	Service	Description	Price 	Time 
	Bus to Roma Termini Station	Several buses run directly from Ciampino International Airport to Roma Termini Station. These include buses run by <a href="#">SIT</a> , and <a href="#">Terravision</a> . From the Station to the University you can either walk (15 minutes) or take a taxi (circa 8 euros).	About 5 euros	Around 30 minutes
	Taxi to the University	You can find official taxi stands outside all terminals. Make sure to only use official taxis, clearly marked by a bright TAXI sign.	Fixed one-way fare: 50 euros.	30-45 minutes.

## How to get to Rome: by train

Rome is well connected to both the high-speed and the local railway networks. The two high-speed train operators are [Trenitalia](#) and [Italo](#). The two main stations serving high-speed trains are Roma Termini and Roma Tiburtina. Many other smaller stations are scattered throughout the city, catering to local and regional traffic.

## How to get around in Rome: public transport

All public transport tickets are integrated and can be used on buses, trams, and metro trains. A one-way single ticket costs 1.50 euros and is valid for 100 minutes. You can also buy daily and multi-day passes. Find more information [here](#).

## Accommodation Suggestions

Suggestions on accommodation will be posted soon.

We list below some options for accommodation. We have agreements in place with some of them, meaning you can book at discounted rates.

- [La Foresteria Sapienza](#). Price for a single room: 50€. For a double room: 65€ (for the whole room). Breakfast not included. This accommodation can only be booked through us: fill in [this form](#) and send it to us [via mail](#).  
**Warning:** subject to availability. Send the form within February, 20 and we will contact you as soon as possible to confirm availability. Eventual cancellations need to be notified with at least 2 weeks of advance.
- University College [Maria Consolartice](#). Price for a single room: 50€. For a double room: 70€ (for the whole room). Breakfast included.
- [Regina Mundi](#) Residence. Price for a double room: 95€ (for the whole room). Breakfast included.

## Sign up

Please sign up for the workshop using [this Google form](#). For any doubt, do not hesitate to get in touch writing a mail at [airo.young.researchers@gmail.com](mailto:airo.young.researchers@gmail.com).

**IMPORTANT.** Thanks to the financial support offered by AIRO and our sponsors we are able to provide a limited number of grants to cover accommodation expenses. The Grants are awarded on a first-come first-served criterion to eligible AIROYoung members (for details on what makes you an AIROYoung member, visit the [AIROYoung website](#)). Awarded participants will be contacted by email.