

# Emerging Optimisation Problems in Complex Networks

# First AIROYoung Workshop — 16-17 February 2017, Rome, Italy

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Registration

## About (back to top)

We are pleased to invite you to attend the first AIROYoung Workshop. *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 carreer 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.

Participation to the workshop is **free** of charge. Furthermore, AIROYoung members can request a <u>travel grant</u>. <u>Register now!</u>

This workshop is organised by <u>Lavinia Amorosi</u> (University of Rome, La Sapienza) and <u>Alberto Santini</u> (University of Bologna), who are also part of AIROYoung's steering committe together with <u>Martina Fischetti</u> (Danish Technical University) and <u>Veronica Dal Sasso</u> (University of Padova). AIRO is currently chaired by Prof. <u>Daniele Vigo</u>.

This workshop has been made possible thanks to the sponsoring of:





ASSOCIAZIONE ITALIANA DI RICERCA OPERATIVA



# **©** Call for Papers (back to top)

We invite contributions from *all researchers* in the area of Network Optimisation.

Young researchers (PhD students, recent PhD graduates) can also contribute their work on other areas. These works will be presented in a special «Young Researchers» session.

Interested applicants can send a short abstract (max 1 page) to <a href="mailto:airo.young.researchers@gmail.com">airo.young.researchers@gmail.com</a>, and should prepare a 30-minutes presentation. Please use the subject «AIROYoung Workshop Submission».

The **deadline** for submissions is January 15, 2017.

# Programme (back to top)

Thursday, February 16, 2017		
13:00	Registration (room 34, 4th floor)	
_		
14:00		
14:00	Invited speaker (room V, 4th floor)	
_	Prof. Justo Puerto, University of Seville	
15:00		
	A fresh view on k-sum optimization and	
	the Discrete Ordered Median Problem	

15:00	Coffee	break (room 49, 4th floor)
15:30		
15:30	Seminar session (room V, 4th floor)	
- 17:30		
	15:30 - 16:00	Arthur Kramer, University of Modena and Reggio Emilia  Enhanced arc-flow formulation to minimize weighted completion time on identical parallel machines
	16:00 - 16:30	Thalis Zis, Technical University of Denmark  Minimization of pollutant emissions of ocean going vessels near and at ports
	16:30 - 17:00	Giusy Macrina, University of Calabria  Green vehicle routing problem with mixed vehicle fleet, partial recharge and time windows

	17:00 - 17:30	Martina Fischetti, Technical University of Denmark  Cable routing of real-world offshore wind parks: can we improve it using Mixed Integer Linear Programming?			
20:00	Social	dinner			
Friday, February 16, 2017					
09:30 - 10:30		t <b>ed speaker (room V, 4th floor)</b> Maria Grazia Scutellà, University of			
	-	zing Green Wireless Local Area cks: nominal and uncertain ios			
10:30 - 11:00	Coffee	break (room 49, 4th floor)			
11:00 - 12:30	Semin	ar session (room V, 4th floor)			
	11:00 - 11:30	Rosario Paradiso, University of Calabria			
	-	A Periodic Inventory Routing Problem Investigation			
	11:30	Anna Melchiori, IAC-CNR			
	12:00	Optimizing Emergency Transportation through			

		Multicommodity Quickest Paths	
	12:00	Tommaso Colombo, University of Rome Sapienza	
	12:30	Combining supervised and	
		unsupervised learning techniques	
		to detect postural disorders	
12:30	Lunch	Lunch break	
-  14:00			
	Semin	ar session (room V, 4th floor)	
_		, , , , , , , , , , , , , , , , , , , ,	
15:30			
	14:00	Tommaso Pastore, University of	
	_	Napoli Federico II	
	14:30	The colution of lange coals	
		The solution of large-scale Minimum Cost SAT Problem as a	
		tool for data analysis in	
		bioinformatics	
		stotity of meetics	
	14:30	Umberto Dellepiane, ACT	
	_	Operations Research	
	15:00	Pi loyal Annroach for Supporting	
		Bi-level Approach for Supporting Large-Scale Cross-Sectorial Flows	
		Optimization in Industrial	
		Symbiosis	
	45.00	Ciarria Crassi Hairas in CD	
	15:00	Giorgio Grani, University of Rome	
	- 15:30	Sapienza	
	13.30	Revenue Management: a Market-	

		Service decomposition approach for the Sales Based Integer Program model	
15:30	Coffee break (room 49, 4th floor)		
-   16:00			
16:00	Seminar session (room V, 4th floor)		
_ 17:30			
	16:00	Alberto Santini, RWTH Aachen	
	- 16:30	A comparison of Acceptance	
	10.50	Criteria for the Adaptive Large	
		Neighbourhood Search	
		Metaheuristic	
	16:30	Giacomo Lanza, University of Rome Sapienza	
	17:00	A Progressive Hedging-Based	
		Meta-Heuristic for the Service	
		Network Design Problem with	
		Stochastic Travel Time	
	15:00	Lavinia Amorosi, University of	
	_	Rome Sapienza	
	15:30	Now Ontimization Droblems in	
		New Optimization Problems in Telecommunication Networks	
		Telecommunication inelworks	
17:30 -	Closing (room V, 4th floor)		
18:00			

### Travel and accommodation

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#### **Getting to Rome**

#### By plane

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 min away from the city centre.

To get from Fiumicino International Airport to Sapienza University Campus you have three options:

#### • Shuttle Train to Roma Termini Station.

There is a direct train (Leonardo Express) from Fiumicino International Airport to Roma Termini Station. The fare is €14. For information about the shuttle train timetable, please visit this website. From Roma Termini Station you can take a taxi cab, and you can expect to pay about €8 to get to the workshop site (main entrance of Sapienza University). Directions will be posted at the entrance.

• **Bus to Roma Termini Station.** Several buses run directly from Fiumicino airport to Roma

- Termini Station. These include buses run by <u>SIT</u>, and <u>Terravision</u>. Prices are usually about €5 each way, and the ride takes about a half an hour, depending on traffic.
- Taxis. Taxis pick up is outside all Terminals.
   Service is regulated and one-way between the airport and downtown is €50. Be sure to use an official taxi. Do not trust people who approach you offering taxis. They are unauthorized and may charge exorbitant rates.

To get from Ciampino low cost airport to Sapienza University Campus you have three options:

- Train to Roma Termini Station. There is a train station at Ciampino. To get there, you have to take one of the <u>ATRAL buses</u> from the airport. The fare is €1,30; the drive to the train station takes 5 minutes. From there, the train to Roma Termini Station takes 15 minutes and costs just €1,50.
- Bus to Roma Termini Station. Several buses run directly from the Ciampino airport to Roma Termini Station. These include buses run by <u>SIT</u> and <u>Terravision</u>. Prices are usually about €5 each way, and the ride takes about a half an hour, depending on traffic.
- Taxis. Taxis pick up is outside all Terminals. Service is regulated and one-way between the airport and downtown is €50. Be sure to use an official taxi. Do not trust people who approach you offering taxis. They are unauthorized and may charge exorbitant rates.

#### By train

Rome is well connected to the main Italian cities as well as less touristy and remote places throughout the country thanks to <u>Trenitalia</u>'s railway network. Main train stations in Rome are Roma Termini Station, (central hub of public transport in Rome for both buses and Metros A and B), and Roma Tiburtina Station (Buses and Metro B).

#### Getting around: bus, tram and metro

If for any reason you take a bus, tram, or the metro, you need a single ticket, which costs €1,50 and is valid for 75 minutes. Tickets can be purchased at tickets machines, in bars, tobacconists and news-stands.

#### **Accommodation**

It is possible to reserve your room at a special rate for Sapienza at Casa dell'Aviatore, which has two locations, one in Viale dell'Università (7 min away from the Statistical Departement) and another in Via Spallanzani (15 min away from the Statistical Department). To reserve your accommodation, simply fill out the accommodation form and send it to Mrs. Lavinia Amorosi either via mail or by fax (+39 06 4991 0433). Please take into account that a limited number of rooms are available, so it is better to reserve as soon as possible. Cut off date for reservation is the 10th of January. For more information about Casa dell'Aviatore visit the web site casaviatore.it.

Special rates are available for workshop participants: see the rates summary.

Other hotels are available close to the university, such as the <u>Globus Hotel</u> and the <u>Ateneo Hotel</u>.

#### **Getting to the Statistics Department**

The Statistics Department is located whitin the Sapienza University Campus (main entrance in Piazzale Aldo Moro 5). A campus map is <u>available</u> here.

# Travel Grant (back to top)

AIROYoung members can benefit from a travel grant provided jointly by AIRO and EURO. The grant amount depends on the travel expences incurred and the total number of participants at the workshop. If you are not an AIROYoung member, send an e-mail to <a href="mailto:airo.young.researchers@gmail.com">airo.young.researchers@gmail.com</a> in order to enroll to AIRO. To be eligible to join AIROYoung, you must either (a) be a Bachelor, Master's or PhD student; or (b) have obtained your PhD at most

five years ago; or (c) be younger than 35.

The travel grant is available for the **first 15 participants** in order of registration.

By enrolling in AIROYoung, you also become a member of AIRO and can therefore join our newsletters, receive the 4OR journal, and enjoy discounts to the association's initiatives, e.g. the «Optimization and Decision Science» annual conference which in 2017 will be held in Sorrento in early September.

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