

DAILY NEWS



news from the 24th International Olympiad in Informatics



hello venice



An Italian treasure

A whole day in Venice was programmed for the IOI army! Who has not longed to see Venice, city of mirrors, city of mirages, known for its extravagant carnivals and elaborate masks? Mysterious, multifaceted and steeped in history, it is considered the most romantic city in Italy. The IOIers were all awake long before the sun had risen, and after a trip of a couple of hours arrived in this magic and unique city! A 30 min trip on the riverbus brought them to the breathtaking Piazza San Marco, Venice's main square, and seeing the majestic church and bell-tower overlooking the bay was unforgettable.

calendar Saturday 29

H	CONTESTANTS	LEADERS	VISITORS
07:00 - 08:00	Breakfast		
08:00 - 09:00	Breakfast		
09:00 - 10:00	Tour of Sirmione	Meeting	Tour of Sirmione
10:00 - 11:00			
11:00 - 12:00	Lunch	Lunch	Lunch
12:00 - 13:00			
13:00 - 14:00	Free Time	Lunch	Lunch
14:00 - 15:00			
15:00 - 16:00	Closing Ceremony		
16:00 - 17:00			
17:00 - 18:00			
18:00 - 19:00			
19:00 - 20:00	Farewell Dinner Garda Village		
20:00 - 21:00	Farewell Dinner Garda Village		
21:00 - 22:00	Free Time		
22:00 - 23:00	Free Time		
23:00 - 00:00	Free Time		



interview



Selection of the Italian Olympic contestants: a “decimation” process

Nello Scarabottolo
Vice president of the Italian Olympiad in Informatics Committee

How was the Italian team for IOI 2012 selected?

There were four main steps: In December 2010 10,000 students took a 75 minute paper-based test with 20 questions on logic, mathematics, algorithms, and simple programs. 1,000 students were selected. In the next step, in April 2011, students had to tackle a PC-based test: 3 hours for designing, coding and testing 3 programs, solving medium-difficulty problems. Around 100 students were admitted to the Italian Olympiad in Informatics, held in October 2011. The organization was very similar to one IOI day: 5 hours for designing, coding and testing 3 programs, solving higher-difficulty problems. Gold and Silver medallists started training with the Delegation leader, the Deputy leader and other University staff, online and in 3 full-immersion meetings (3-4 days each) with simulations of IOI competition days, to allow trainers to select the Olympic team (4 contestants and 2 reserves). For IOI2012, it was necessary to select two Olympic teams so the group was enlarged to include volunteer students already qualified for the Italian Mathematics Olympiad. This choice was shown to be successful: 4 “mathematicians” were selected (2 in team A, 1 in team B, one reserve) thus confirming the strict relationship between mathematical aptitude and programming skills.

Venice “La Serenissima”

The groups toured the Palace of the Doge, the leader of the Republic of Venice and by then the sun had come out and the day presented itself as one of the warmest of the week. IOI visited the Cathedral of Saint Mark built in 828, reserved for the group, and a guide illustrated in detail the history of the church and of its characteristic cupolas and gold mosaics. Piazza San Marco is lined with numerous bars and restaurants, and nearby are more private locations such as the ‘Ponte dei sospiri’ that used to lead prisoners into the ‘Prigioni Nuove’ which was the first building in the world to serve exclusively as a prison. The group then had a pleasant walk to the Venice Arsenal, the source of Venetian sea power since the 12th century, where they ate a quick (and long awaited) lunch made by the students of a local hotel and catering school.

The following boat trip along the Canal Grande, the town’s main waterway that goes through the heart of the city, was an ever-changing spectacle created by the beautiful palaces and churches that line its banks. The trip back home was used by almost everyone to sleep off the fatigue left by the strong emotions of the intense week and of the long day. And, now that the contest is over, who knows how much sleep the participants got last night?



PHOTO BY ANTONIO COSTANTINI

snack



Pesto alla Genovese

- Basil
- Garlic
- Pine nuts
- Parmesan
- Sheep milk cheese
- Olive oil

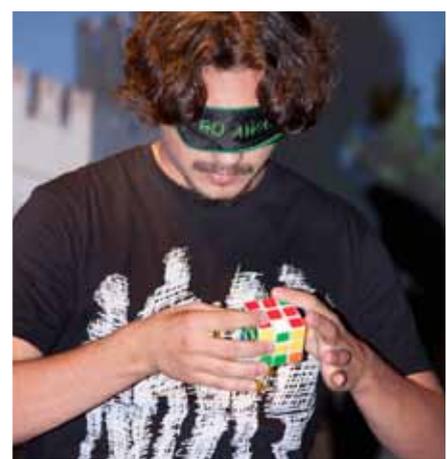
Pesto alla Genovese is a pasta topping from Genoa, Italy. The name "Pesto" means "pound" and this is due to the traditional recipe, in which ingredients are pounded in a marble mortar. Pesto is usually served with trofie (short fresh pasta), potatoes and green peas, even though in the modern recipe it is used as a complete topping.

byte



Plutarch

The mind is not a vessel to be filled, but a fire to be kindled.



IOI's Got talent

Yesterday evening our entertainment team organized a show, involving both volunteers and contestants. Everybody brought something different to the stage: we had singers and musicians, for example a ukulele and harmonica duet, a break dancer, comedians and also a boy who completed a Rubik Cube blind-folded in a few seconds. The evening was organized as a talent show, with some "judges" who gave their opinion after each performance: their comments were the funniest part of the show, also because they had weird names, such as Slash or Waka Waka. Even if the audience was very tired after the trip to Venice, they really enjoyed the

show, and supported the performers very enthusiastically. Once again we showed that the IOI aren't just a competition, but that they also provide opportunities to meet people and create new friendship and ties.

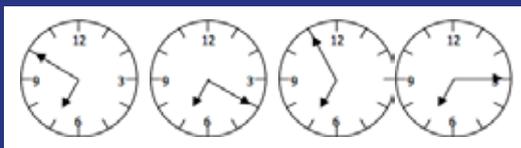


games

BY
THE MATEMATICA SENZA FRONTIERE
ITALIAN TEAM

1 Secret meeting

Only one of these watches gives the time of a meeting between 2 spies.



Give the time of the meeting, knowing that:

- One watch is 20 minutes slow
- One watch is 5 minutes fast
- One watch is 25 minutes slow

2 The bus

To get to University, Sylvia can take bus n. 3 or bus n. 7.

A bus runs every 15 minutes on each bus route. Bus n. 3 always leaves 5 minutes after bus n. 7.

Sylvia often goes to University, at very different times and she always catches the first bus that comes by.

Which is the bus route Sylvia uses most frequently?

social

twitter

Risultati per #ioi2012

Tweet Top / Tutto / Persone che segui

- Marcel Stockli** @gc_msc 1h
Another Italian queue at #IOI2012 waiting n minutes again
pic.twitter.com/Y6OXdTxB
[Visualizza la foto](#)
- Alex Palcuie** @AlexPalcuie 5h
International Olympiad in Informatics result for #Romania: 3 gold medals and one bronze. Good job guys #ioi2012 bit.ly/TlgWuo
Espandi
- Nicoletta Rossi Ganzer** @DirectingNiki 6h
@IOI2012 IOI army in Venice!! pic.twitter.com/h9Ja934P
Ritwittato da IOI 2012
[Visualizza la foto](#)
- Ojārs Vilmārs Ratnieks** @ojars_ratnieks 16h
In every olympiad, you need to do something amazing during night. #ioi2012 is not an exception. #marksArMasinuVizinaas
Ritwittato da IOI 2012
Espandi

contact

dailynewsioi2012@gmail.com

Game solution issue 3

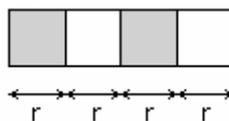
Cutting the cake

* Comparing the first and second layer there is equality between vanilla and chocolate. However, in the third layer, the light areas are inferior in volume to the dark ones:

* for the vanilla : $pr^2 + p(9r^2 - 4r^2) = 6pr^2$

for the chocolate : $p(4r^2 - r^2) + p(16r^2 - 9r^2) = 10pr^2$

Thus Gastone is wrong.

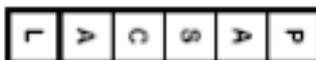


Hidden faces

Here is a possible model:



and what Barbara sees is



happy birthday



29 September
Oleg Ivanov (Russian Federation)
Ziad Ouf (Egypt)