

## IOI planet



## Contest 2 results

Contest day 2 has finished. 309 participants from 81 countries took part. In first place in terms of points won was China, in second – Russia, and in third – Iran.

✓	Rank	First Name	Last Name	Team	1	2	3	Day 1	4	5	6	Day 2	Global
	1	Ce	Jin		100	100	97	297	100	100	100	300	597
	2	Zuofan	Wu		100	100	100	300	100	100	60	260	560
	3	Vladislav	Makeev		100	100	97	297	100	100	60	260	557
	4	Mikhail	Putilin		100	100	71	271	100	100	60	260	531
	5	Takuya	Inoue		100	34	97	231	100	100	60	260	491
	5	Zhizhou	Ren		100	34	97	231	100	100	60	260	491
	7	Yikuan	Li		100	34	93	227	100	100	60	260	487
	8	Ta-Jul	Ho		100	34	71	205	100	100	60	260	465
	8	Jaroslław	Kwiecień		100	34	71	205	100	100	60	260	465
	8	Hristo	Venev		100	34	71	205	100	100	60	260	465
	11	Ali	Behjati		100	64	38	202	100	100	60	260	462
	11	Jacob Por Loong	Teo		100	64	38	202	100	100	60	260	462
	13	Arash	Mahmoudian Bidgoli		100	64	23	187	100	100	60	260	447
	14	Mateusz	Radecki		100	34	71	205	100	70	60	230	435
	15	Daniel	Chiu		100	34	38	172	100	100	60	260	432
	15	Jaehyun	Koo		100	34	38	172	100	100	60	260	432
	15	Minh	Phan Duc Nhat		100	34	38	172	100	100	60	260	432
	15	Grigoriy	Reznikov		100	34	38	172	100	100	60	260	432
	15	Daniel Peter	Rutschmann		100	34	38	172	100	100	60	260	432
	15	Yuta	Takaya		100	34	38	172	100	100	60	260	432
	15	Václav	Vohejn		100	34	38	172	100	100	60	260	432
	22	Seungwon	Shin		100	34	31	165	100	100	60	260	425
	23	Lawrence	Li		100	34	23	157	100	100	60	260	417
	23	Aleksejs	Popovs		100	34	23	157	100	100	60	260	417
	23	Dhruv	Rohatgi		100	34	23	157	100	100	60	260	417
	26	Nguyen	Pham Cao		100	34	71	205	100	70	41	211	416

# Committee members on IOI 2016



The chairman of the International Technical Committee (ITC) told us about his impressions of Russia, the excursions, and the technical details of IOI 2016.

**- How does the contest management system developed by Russians differ from the Italian one?**

- To be honest, it is very similar, they are both very good. At least there are no big issues with the system this year.

**- How would you evaluate the complexity of the tasks this year?**

- If you look over a longer period the tasks are definitely getting harder and harder. The first day's tasks were unusually hard but the second day's tasks were a little bit easier.

**- How would you evaluate the technical infrastructure of the IOI: the service, laptops, machines and so on?**

- The technical team you have, the Russian team, is excellent. It has been very good, I would say.

**- What is your overall impression of the IOI in Kazan?**

- Personally, I love it. I think this is a great year. I am from Sweden and we like order. Logistics and transportation here are really good. Personally I think that the food has been great this year. I guess I like Russian food. All in all I think it has been a great event.

We spoke with International Scientific Committee member Michal Forisek about the tasks and the contestants.

**- What were the aims of your committee for IOI 2016?**

- For IOI 2016, as with previous Olympiads, we try to make the tasks interesting for all the contestants who come here. Almost a year ago we asked people from all over the world to contribute their tasks, and discussed these contributions here, in Russia, in February. Our International Scientific Committee tried to decide tasks which would be suitable for IOI 2016. So the decision process was in Russian, and most of the materials were developed by Russians.

**- What kind of tasks did you set for IOI 2016?**

- I must say that the tasks are very diverse, of various levels of difficulty and covering different aspects of computer science. And I believe that we managed to do this.

**- What was new about these tasks?**

- As much as possible, we try to come up with original tasks. Contestants should not be able to remember content in advance, and the main purpose is developing creativity and coming up with new original ideas. On the one hand tasks must be quite traditional, still algorithmic, but on the other we are trying to make contestants analyze, solve problems they haven't seen before.

**- How would you evaluate the contestants' capacity in solving this year's tasks?**

- It's the same each year. I am amazed. Even though I have been a contestant for an international Olympiad in informatics a lot of years ago I am still surprised and amazed by the creativity of contestants. They always manage to come up with many of clever ideas, many of them have an incredible speed solving three or two competition tasks just for a single hour. And we are very glad that the final results are usually high.



# Contestants talk about the tasks

Contest 2 at the Olympiad has finished. Some of the contestants from the 81 countries that took part shared with us how they found the tasks.

**Hristo Venev, Bulgaria:**

This is my fifth Olympiad. I won a gold medal at my second. As for IOI 2016 I can't yet put my feelings into words – all I can say is that all the tasks had relatively straightforward solutions. True – I spent about 2 hours on the first task. The second day was definitely easier than the first.



time solving it. The second round was tougher than the first – that's for certain. This will be my last Olympiad, and I think it might be my best. Nevertheless, I feel a lot freer now – I can finally socialise normally with the other participants and relax.

**Ce Jin, China:**

On the first day the hardest was the second task – it needed a really original solution. Today the third task was the hardest, but I was lucky as I've faced a similar problem before and so I managed to tackle it. This Olympiad was very well organised – the tasks were interesting and the entertainment activities were really fun. Most memorable for me was yesterday, where we cycled along the waterfront – it was great!



**Ali Behjati, Iran:**

The hardest task in the whole Olympiad was the one about the alien – the third task of the second contest. Only one person managed to solve it entirely, and we still don't know the correct answer. IOI 2016 was difficult – the tasks were complicated, but interesting. Some of our team are disappointed that they didn't manage to solve some of the tasks, but in general our results are very good and our team leader is very happy. We liked how the questions were unpredictable, but the best thing about the whole competition was that we made friends with people from all over the world!



**Jaroslav Kwiecien, Poland:**

When I started my goal was to finish in the top 10, so I'm more than happy with my final result (8th). The tasks didn't seem too difficult.



**Vladislav Makeev, Russia:**

I found the second contest round harder than the first. I had issues with the task about the graph. How do you get a lot of points? There's no real secret – you just have to carefully read the question, come up with an algorithm and write it programming language. Sadly this is my last time as a contestant at the Olympiad – I'll be a university student next year.

**Zoufan Wu, China:**

The second contest round tasks were very difficult – I can't even tell you how much. The first and the third were the hardest. The second one turned out to be quite simple, but at first it seemed really complicated. I overthought it and ended up spending too much





### China and Russia take top spots

Today the top four positions at IOI 2016 were finalised: Ce Jin – 597, Zuofan Wu – 560, Vladislav Makeev – 557, Mikhail Putilin – 531.

M.Putilin (photo, right): “The second contest round tasks at the Olympiad were relatively straightforward, but even with three-and-a-half hours I couldn’t completely solve the third one. I finished thirteenth in the table last year, but now I’m in the top five. In my opinion last year’s tasks were harder, but I like the ones this year more. I recently enrolled at ITMO University in St Petersburg – once I’m at university I might help write tasks for the Olympiad and train the next group of contestants.”

### Tradition

## Tour of Russia

What could be more tempting than a holiday in the largest country in the world? Russia has everything, from immense open spaces to from the subtropical Black Sea; from the striking beauty of Lake Baikal to the imperial majesty of the snow-covered taiga.



What could be more exciting than the sheer scale of Russian nature - the highest mountains, the longest and richest of rivers, the green forests, unique architecture, ancient monasteries and gold-domed churches? What could be better than a visit to Russia’s historical cities, which have preserved their unique customs and traditions through the years and centuries? What could surpass the feeling of warmth and hospitality of the various nations inhabiting Russia’s vast territory?

### Russian Cities

**MOSCOW.** What should the capital of the largest state on Earth look like? Fantastical, majestic, dazzlingly beautiful, somewhat mysterious and very unique; this is Moscow - capital of Russia, its “face”, and its centre of politics, science and culture. A city-state with unique character and history, an indestructible symbol of imperial power and grandeur, at once an open-air museum of architecture and a modern megalopolis glistening with glass skyscrapers.

**SAINT PETERSBURG.**

The famous city on Neva River, St. Petersburg, is a place you will fall in love with at first sight. Its entrancing, elegant look is created by strict yet luxurious architecture of the classical era. Magnificent palaces adorned with colonnades, majestic cathedrals and imposing fountains and parks, with the richest of museums, grandiose of monuments, picturesque of embankments and graceful of bridges; dead-straight avenues leading to the iconic Admiralty needle; every year millions of tourists from all over the world visit the city to see this beauty with their own eyes.



### Some useful phrases

ENGLISH	RUSSIAN	TATAR	ENGLISH	RUSSIAN	TATAR
HISTORY	история [istoriya]	тарих [tarich]	BOOK	книга [kniga]	китап [kitap]
ARCHEOLOGY	археология [arkheologiya]	археология [arkheologiya]	RECORD	летопись [letopis’]	ельязма [jiljazma]
EXCAVATIONS	раскопки [raskopki]	казу эшләре [kazu ešläre]	LIBRARY	библиотека [biblioteka]	китапханә [kitapchanæ]
BIRCH BARK	берестяная грамота [berestyayaya gramota]	тузга язган язма [tuzga jazgan jazma]	ARCHIVE	архив [arkhiv]	архив [arkhiv]
WRITING	письменность [pis’mennost’]	язу [jazu]	MUSEUM	музей [muzej]	музей [muzej]
CYRILLIC	кириллица [kirillitsa]	кириллица [kirillitsa]	Cyril and Methodius (the day of Russian Literature)	Кирилл и Мефодий (день русской письменности) [Kirill i Mefodij (den’ russkoy pis’mennosti)]	Кирилл һәм Мефодий (рус язмасы көне) [Kirill һәм mefodij (rus jazması kene)]
PRIMER	букварь [bukvar’]	әлифба [ælifba]			

### Kazan University: our greatest discoveries

List of Nobel laureates who worked at Kazan University during Second World War evacuation of the Soviet Academy of Sciences:

**Nikolay Semenov** – 1956 laureate in Chemistry for his researches into the mechanism of chemical reactions.

**Pavel Cherenkov** – 1958 laureate in Physics for the discovery and the interpretation of the Cherenkov effect.

**Ilya Frank** – 1958 laureate in Physics for the discovery and the interpretation of the Cherenkov effect.

**Igor Tamm** – 1958 laureate in Physics for the discovery and the interpretation of the Cherenkov effect.

**Lev Landau** – 1962 laureate in Physics for his pioneering theories for condensed matter, especially liquid helium.

**Pyotr Kapitsa** – 1978 laureate in Physics for his basic inventions and discoveries in the area of low-temperature physics.

**Vitaly Ginzburg** – 2003 laureate in Physics for pioneering contributions to the theory of superconductors and superfluids

17 August, Thursday

Day ☀️ +28 C / 82.4 F Night 🌙 +23 C / 73.4 F