

Each day while contestants compete and enjoy free time, the IOI officials and team leaders meet together at General Assemblies to thrash out an assortment of issues and manage the games. In 2018 there are 7 of these "GA Meetings". The key agenda points, on Days 3 and 5 are to decide the 3 tasks to be used in each contest and translate them to the languages each team usually work with. This is more than about word meanings and alphabets - layouts can get complicated for right-to-left languages if the original task was designed left to right. (Think, Arabic and Hebrew, though Japanese can cope either way). Preparing the tasks for Contest-1 took the 173 leaders into the early hours to fix but, thankfully, those for Contest-2 were handled swiftly. In addition to task setting and translation, network admin and technical issues during contests have to be reported on at the post-contest GA and solved for next time. (Contest-1 faced some outage issues for a few minutes, and buggy code blocks were occasional torments). But some delays are less digital and, this time, attributable to the call of nature (i.e., high

popularity of the rest rooms at 8:55). Fortunately this year, contest appeals were minimal and those proffered not an issue. Grading this time was also especially speedy.

The GA meetings also provide the opportunity to vote on changes to the rules and regulations. Each leader uses a small wooden paddle with his/her country flag to signal to the meeting committee. Ultimately, the GA serves to make the Olympiad even better and keep it up-to-date, including issues relevant to academic events in general (e.g. plagiarism and fairness). This year GA discussions addressed the international issue of the gender gap in science and the need to support diversity, a topic which also means combatting the world-wide problem of bullying and harassment. (The IOI supports a thorough and progressive Code of Conduct on this). At the end of Day 7, the President, Executive Director, ISC and ITC officers will present their reports on IOI 2018. The final GA is also the time when the IOI elects the next President and other officials. Most important of all - this is when the final results and medals are officially confirmed.





#### **IOI 2018 JAPAN**

TSUKUBA. IBARAKI

International Olympiad in Informatics 2018

September 1 - 8, 2018 Tsukuba, Ibaraki

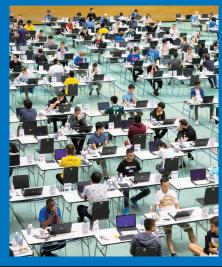
Vol.5 Wednesday, September 5, 2018

### Contest 2 – The Final Arena

Everyone knew the drill to perfection so the arrival and start of Contest-2 at Capio Arena was smooth and professional. 341 contestants were seated well before 9am and the black T-shirted invigilators patrolling calmly (Host Technical and Science Committees). With 60 seconds to start announced, the sound of over 300 chairs shuffling closer to desks signaled that the task-runners were ready for combat. Friends but rivals wished each other luck for the last time at this Olympiad. Minasan, gambarimasu (good luck everyone)!!!

Back at the conference center, leaders began a group discussion in Room 300. As the morning progressed more and more of them began to monitor the live scoreboard on their laptops as solutions to "Mechanical Doll", "Highway Tolls" and "Meetings" (today's tasks) were submitted and graded with 100 possible points for each. Who would get the full 100? Who would achieve it for all 3?

Scores can be seen on the IOI 2018 website at: https://ioi2018.jp/ under the 'Competition' header.



# Wednesday's Schedule September 5, 2018

| Contestants  | Leaders   | Guest   |
|--|---|---|
| Transfer by Bus (KEK→NITS)                               |   |   |
| Breakfast 6:30~8:00                                      |   |   |
| Transfer by Bus  | Breakfast 7:00-9:00   | Breakfast 7:00~8:30<br>(Each Hotel)   |
| Entering Contest Hall                                    |   |   |
| Contest  | Group Discussion<br>(Convention Hall 300)   | Departure from Frontier<br>@9:00  |
| Lunch<br>(Multi-Purpose-Hall and Conference Room101.102) |   | Free Excursion<br>Tokyo Sightseeing   |
| Analysis and Appeals                                     |   | Transfer by Train   |
| Transfer on foot   |   | nunsion by num  |
| <b>Japan Stage</b><br>(Main Convention Hall)             | GA Meeting 6:<br>Review Appeals   | <b>Japan Stage</b><br>(Main Convention Hall)  |
| Transfer by Bus  |   |   |
| <b>Dinner 19:30-20:30</b><br>Transfer By Bus (NITS→KEK)  | <b>Dinner 19:30-20:30</b><br>(Multi-Purpose-Hall and<br>Conference Room101.102)   | Dinner 17:00~18:30<br>(Multi-Purpose-Hall and<br>Conference Room101.102)  |
| Free Time  | GA Meeting 6:<br>Review Appeals   | Free Time   |
|  | Transfer by Bus (KEK→NITS)  Breakfast 6:30~8:00  Transfer by Bus  Entering Contest Hall  Contest  (Multi-Purpose-Hall and  Analysis an  Transfer  Japan Stage (Main Convention Hall)  Transfer by Bus  Dinner 19:30~20:30  Transfer By Bus (NITS→KEK) | Transfer by Bus (KEK→NITS)  Breakfast 6:30-8:00 Transfer by Bus Entering Contest Hall  Contest  Contest  Convention Hall 300)  Lunch (Multi-Purpose-Hall and Conference Room101:102)  Analysis and Appeals Transfer on foot  Japan Stage (Main Convention Hall) Transfer by Bus  Dinner 19:30-20:30 Transfer By Bus (NITS→KEK)  Dinner 19:30-20:30 (Multi-Purpose-Hall and Conference Room101:102)  Dinner 19:30-20:30 (Multi-Purpose-Hall and Conference Room101:102)  GA Meeting 6:  GA Meeting 6:  GA Meeting 6: |

# **Fun-Times to Remember**

**Ice-breakers and Warm-ups:** While the Organizers hope that the whole 8-day program is a fun-time experience for all contestants, some official "Fun-Time" hours at the NITS and KEK dormitory facilities were built into the program. On Sunday evening this was about breaking the ice for new friendships and also reducing nerves before Contest-1. Again on Tuesday evening, the fun was intended to distract from dwelling too much on Contest-2 ahead.

The fun engaged totally different skill-sets, all activities entirely manual - nothing remotely digital. Every kind of juggling and catching prop was prepared -spinning plates, juggling sticks, bean bags, Chinese yoyos, and Japanese 'kendama' (cup-ball handles). Those

proficient instantly wanted to show off their ability, those who had never seen a "diabolo" yoyo before simply wanted to try their hand. To pump the levity up further, balloon-art skills were added to these warm-up games! Tuesday's tools however were far more high-tech - self-balancing personal transporters. Five Segway units were available for lucky contestants to try out. The adrenaline of such thrills (and spills) generates all positive energy.





## **Planet Earth: Mission of Future Technologists**

Historically, Japan has had more than its fair share of natural disasters and extreme weather event. 2018 has also seen exceptional weather. Tsukuba escaped this week's major typhoon, but an earthquake, albeit a gentle one, swayed the city at 5am this morning. Students from non-volcanic countries didn't know what was happening, some were curiously thrilled, others a



little alarmed. Certainly this IOI week has provided a visceral and humbling demonstration of how mankind is at the mercy of our planet. The themes of the Opening Ceremony speeches, as well as Tuesday's science excursions, remind us that CS technologists help us predict and better cope with disasters. But we still need bigger data, greater efficiencies, and smarter algorithms.

## **Japan Stage**

# Formation Shamisen / Drummers in Rock Fusion

From 6pm, the curious sound of multiple 'shamisen' and 'wadaiko' drums could be heard from TICC's Main Convention Hall where the contestants had gathered post-contest. (A shamisen is a three-stringed traditional Japanese instrument a little like a banjo. 'Wadaiko' refers to Japanese-style drumming). This was a grand spectacle of youthful exuberance, technical brilliance and color performed jointly by the Kiraku-za theater troupe and 'Mugenjuku' shamisen students from Tsukuba University. The music, a fusion of Western rock styles and Japanese folk songs and instruments was punctuated by joyous yelps and cheers from the cast of over 40. Eight lucky IOI contestants had the chance to join in for one song from Okinawa while the final Hokkaido fisherman's number allowed the whole audience to shout out "dokkoisho, dokkoisho, souran, souran". This cannot really be translated, but you 'feel' what it means!

