

Minutes of the International Board IPhO 2016

1. A total of 398 students, 25 of whom were female, participated in the IPhO. The participants came from the following countries: Armenia, Australia, Austria, Azerbaijan, Bangladesh, Belarus, Belgium, Bolivia, Bosnia and Herzegovina, Brazil, Bulgaria, Cambodia, Canada, China, Colombia, Costa Rica, Croatia, Cyprus, Czech Republic, Denmark, Ecuador, Egypt, El Salvador, Estonia, Finland, France, Georgia, Germany, Ghana, Greece, Hong-Kong (China), Hungary, Iceland, India, Indonesia, Iran, Israel, Italy, Japan, Kazakhstan, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Macao (China), Macedonia, Malaysia, Mexico, Moldova, Mongolia, Montenegro, Nepal, Netherlands, Nigeria, Norway, Pakistan, Poland, Portugal, Qatar, Republic of Korea, Romania, Russia, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Suriname, Sweden, Switzerland, Syria, Taiwan (Chinese Taipei), Tajikistan, Thailand, Turkey, Turkmenistan, Ukraine, United Kingdom, USA, Uzbekistan, Vietnam. Luxembourg and Tunisia sent observers.
2. A quorum of 147 leaders was present.
3. Leaders were asked to check their marks, and then some statistics were shown. The final marks were roughly symmetric about 25. The threshold for Gold Medals was 39.8 marks, for Silver Medals 30.7 marks, for Bronze Medals 22.7 marks, and for Honourable Mentions 17.5 marks. There were 47 Gold Medals, 74 Silver Medals, 98 Bronze Medals, and 65 Honourable Mentions awarded.
4. The special prize for the Most Creative Solution was sponsored by the Paul Scherrer Institute. The following Special Prizes were awarded:
 - Best Overall: Chenkai Mao, China
 - Best Theory: Aleksandr Artemev, Russia
 - Best Experiment: Chia-Hsuan Lu, Taiwan (Chinese Taipei)
 - Most Creative Solution of Experiment: Taavet Kalda, Estonia
 - Best participant from Switzerland/Liechtenstein: Markus Khler, Switz.
 - Best female European: Aletta Csapo, Sweden
 - Best male European: Aleksandr Artemecv, Russia
 - Best female from Asia.Pac: Thi Huong Thao Dinh, Vietnam
 - Best male from Asia Pac: Chenkai Mao, China
5. The final results were accepted by the International Board almost unanimously.
6. Hans and the International Board thanked Simon Birrer, Andrea Schneider, Marco Gerber and Thomas Uehlinger, amongst others, for their efforts in organising the Olympiad.
7. It was announced that IPhO 2017 would be held in Indonesia, possibly in Bali. The International Board expressed its gratitude to Indonesia for agreeing to host the Olympiad on such short notice.

8. Portugal has confirmed, with a letter from the new Minister of Education, that it will host the Olympiad in Lisbon in 2018. Hungary has confirmed in writing that they will organise the Olympiad in 2026. Since the host for 2021 was to be Indonesia, but they are helping us by organising in 2017, a new host is needed for 2021. Singapore is no longer able to do this. There is another option here so far which will be explored, and as soon as we know for sure, this will be communicated to everyone. We are fortunate to have a long list of countries that are interested in organising the Olympiad.
9. The Secretary asked the International Board to contribute ideas for a revamp of the website, and presented some suggestions received so far. The intent would be to make it reflect our Olympiad in the modern age and make it useful to our colleagues.
10. Eli Raz presented a proposed change to the awarding system: a) that the thresholds for medals and HM be established after the moderation and published after the acceptance of the final grade; b) that the percentages be changed to 12% gold (up from 8%), 18% silver (up from 17%), 25% bronze and 17% honourable mentions. This is based on the average actual percentages after the final moderation now; and c) that moderation time be increased to at least 35 minutes for each question for each delegation. Eli presented the following as a rationale for this proposal: Currently,
 - some leaders devote time to students close to the thresholds, and ignore others who deserve points but are too far away from the next threshold
 - Sometimes leaders argue about something that is not really deserving, because a student is very close to a threshold.
 - Markers might not want to give students points they deserve, for instance where they haven't understood something and so a large shift is possible, to keep the medals reasonable.
 - The limited time for moderation leads to focus on 'valuable' points and having to explain to students why they didn't get the points they deserve.
 - The ratio of silver to gold medals is highly skewed by the inflation in the current system.
 - For the reputation of the IPhO the medal fractions should not differ from the statutes.

The floor was opened for discussion, with the following comments:

- Jan Mostowski (Poland): Supports the proposal. Why do we have the current system? Many leaders wanted to increase the number of medals (makes it easier to get support at home). Also, the atmosphere would be friendlier. This seems to have occurred, but at other Olympiads, there is also a friendly atmosphere, so this is not a huge issue. Fixing the number of medals would be better. Exact cutoffs a matter for discussion.

- Jaan Kalda (Saudi Arabia): In favour of existing system. Argument of atmosphere is probably not worth a lot. What is most important is the name of the medal - noone remembers the points. In the case of the current system, leaders can focus their energies on those students for whom this can change, and hence to make the most difference. There is not enough time not just during moderation, but also during preparation, to deal with every single point for every students. This is a more fair system, as where it really matters, the results can be made more fair. Most leaders work very hard during the IPhO, and get a lot of relief hearing the medals. Now you want to allow them to have two more days of uncertainty - this will increase the risk of heart disease, etc.
 - Stefan Petersen (Germany): Is sympathetic to the marks after moderation, to encourage people to focus on the physics. If this is changed, though, perhaps we could also change the medals to match the fractions used at other Olympiads, eg 10, 20, 30 - since HM has perhaps not really as much prestige and other Olympiads give more medals.
 - Lasse Frant (Finland): Setting the medal boundaries before moderation has these large black spots near medal boundaries, so that most people don't miss the medal by 0.1 points. This new system would vastly increase the number of students who are in this bad situation. New system will have leaders wanting to moderate each and every 0.1 that might be relevant, so the moderation time will increase dramatically so that people never have to give up. The current system allows people to be relatively happy in a shorter time. Giving enough time, regardless of the rest of the system, is the most important thing.
 - Eli Raz (Israel): Our duty is to moderate for every student. We owe every student every effort to get the points that he or she really deserves, for correct physics.
 - Arshad Momen (Bangladesh): From the perspective of a relative newcomer, the current system works in our favour - we have limited training, other countries would generally do better. We need to look at every student? If you have more people in your marking team, you can do that better - so rich countries get an advantage. If the new system is put into place, then newish countries with small leader teams will feel handicapped.
 - Will comments be circulated? Perhaps. Please send to Eli and Hans.
 - Proposal to do dummy medals for everyone for showing to others, then have just an internal ranking here - avoid all this hassle.
11. Prof. Engelbert Stütz, Austrian leader since 2005, has been involved with the Austrian Physics Olympiad since 1982. He is leaving us this year – farewell and all the best for your future.
 12. European Physics Olympiad suggestion: IPhO - easy to grade but not like real research. There exists the Hungarian Eötvös competition, short and challenging problems, tests creativity and independent thinking. Proposal: create a European Physics Olympiad in the mould of the Eötvös

competition, but unlike this competition, include an experimental round. Interested parties please talk to Jaan.

13. Andrzej: Michele Dolfi created for us some wonderful software which made our lives much easier. Suggestion that the Olympiad keep using this program - acclamation from the floor. Comments requested. Israel - greatly appreciated the program. Would like the possibility to save the file in tex. Suggesting that it would be nice to narrow down the list by language, for example, to make it easier to navigate.
14. Anwesh says a few words - proceedings from last year are now online. Please download a copy if you would like one. A 30 minute video summarising the Olympiad is also on that page.
15. Thanks are offered by Thomas to all who helped with the Olympiad. and to the Academic Committee - a young team, mostly volunteer - Michele, Andreas, Johanna, Simon, Lionel, Levy, Yves, and to Hans, Matthew for advice and support.
16. The final meeting was closed at 8:37pm.