How we organized the IPT and (almost) survived

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To win a tournament is one thing, to organize it – something completely different. This is what a team of students from EPFL had to learn last April, when EPFL held the 2019 edition of the International Physicists' Tournament (IPT) – the biggest international competition in physics for teams of university students. For me, as the team leader of the EPFL team in 2017-2018, it was also a drastic change to become the main organizer of such an important event, hosting more than 200 participants from 20 countries.

Any organization starts with people, and the IPT 2019 was no exception. We started as a group of 4 students (all former IPT participants), trying to pitch this idea to the Physics Section of EPFL in May 2018 and somehow, after the EPFL team won the IPT 2018 in Moscow, everyone around was really motivated to host the next edition of the tournament in Lausanne. Another nice surprise came from the former head of the Physics Section, prof. Jean-Philippe Ansermet, who agreed to be the president of the Local Organizing Committee (LOC) and let us have regular LOC meetings in his amazing office.

The next step after forming the core of the organizing team was to secure the funding for the event. Immense help here came from various institutions within EPFL (Physics Section, School of Basic Sciences, Institute of Physics), as well as the vice-presidency for education. Their timely support allowed us to quickly secure the accommodation for the participants of the IPT 2019 already during autumn and slowly, but steadily, start a broader search for funding to be able to feed the participants with proper amounts of nice Swiss food, entertain them both scientifically and culturally and smoothly run the tournament. This turned out to be a long and exhausting experience and there were days, when we were leaving the LOC meetings without being sure if we can actually pull the whole thing through. Nevertheless, after half a year of work, we were finally (almost) confident, that we have sufficient funds not to let the international delegations starve to death on the Swiss ground. For that we can't but thank the SPS, who supported the IPT 2019 through the MAP platform of SCNAT! It was also very pleasant to see the strong support from other Swiss institutions (ETHZ, SNI, PSI, EMPA) and companies (Sensirion, Roche, GMP, Logitech), as well as to be officially supported by the City of Lausanne.

Financial matters aside, all of a sudden it was already February and the registration for the IPT 2019 was officially open. We spent the next month or so collecting the information on food preferences, T-shirt sizes and other sensitive participants' data. And when the first boxes with the brochures from sponsors started flooding our storage room, we realized how close we were to actually running (or ruining?) the tournament. A couple more weeks of settling the last details with the caterers, suppliers and administrative bodies and the Easter weekend fell upon our small team of organizers giving us a little break before the event.



Captain of the French team from ENS Lyon, presenting the problem "Water Dancing Ball". © C. Beaubis

The next week is best described by "controlled chaos", which from time to time went out of control. I probably shouldn't concentrate too much on all the unplanned situations which were arising during the tournament, but more on how brilliantly the organizing committee managed to solve them on the fly. For us and for the fellow volunteers it was probably the most valuable experience one could only get during the Easter week. It was also amazingly nice to work in close collaboration with the broader IPT community, especially the members of the International and Executive Organizing Committees of the IPT, without whom it would be close to impossible to run the tournament. Another great opportunity came from the Swiss National Science Foundation, whose grant allowed us to invite many experienced jury members from abroad to reduce the pressure on the local jury and set higher judging standards.



Participants of the IPT 2019 at the new iconic square on EPFL campus - Place Cosandey. © F. Daburon



Part of the Local Organizing Committee at the Farewell Dinner: J.-Ph. Ansermet, E. Glushkov, Q. Dubey (in front), D. Mari, A. Vernier and J. Fisher (at the back, barely visible). © V. Navikas

During the Easter week itself the rooms of EPFL have witnessed two days of preliminary physics fights, a semi-final with six best teams, lab tours, aperitifs and live music, a selfmade fondue for 200 people, group photos on the newly built Cosandey square, lots of positive emotions, science and fun! A separate praise should go for the excursion to CERN, where the participants could enjoy going underground to the famous tunnels and seeing all the experiments of the LHC. Logically enough, the tournament ended with an impressive final physics fight between teams from France and Ukraine, showing some beautiful experiments demonstrations (e.g. a meter-high tesla coil). It was followed by a (hopefully) notso-boring award ceremony decorated with talks from two passionate science communicators from UK- Jessica Wade and Wendy Sadler. The cherry on the IPT cake was the farewell dinner, where all participants could just relax, communicate with each other in an informal setting and enjoy the well-deserved freedom (and some delicious food and drinks).

It is really hard to transmit what it was like to be a part of IPT 2019 at EPFL. To get a glimpse of it, you should probably watch some of our videos on Youtube, but to truly feel it... I would definitely recommend taking part in one of the forthcoming editions, either as a participant, juror, volunteer or just a spectator! EPFL has been the outpost of IPT in Switzerland for many years now, but more and more people in other Swiss universities become interested in taking this challenge and representing Switzerland at the international final. Basel, Bern, Fribourg, Geneva, Neuchâtel, Zurich... are we going to see your teams next year?!

Rückblick Bürgi Symposium

Das 3. Internationale Jost Bürgi Symposium in Lichtensteig (Kanton St. Gallen), dem Geburtsort Bürgis, wurde auch diesmal an zwei Tagen durchgeführt. So trafen sich am Freitagnachmittag, 3. Mai 2019 Historiker verschiedener Fachrichtungen, um Bürgi, seine Zeit und sein Umfeld aus verschiedenen Blickwinkeln zu beleuchten. Am nächsten Tag vormittags wurden zuerst von zwei renommierten Kunsthistorikern einige Bürgi Uhren aus Wien und Dresden vorgestellt, Meisterwerke, die Eleganz und Präzision vereinen. Anschliessend im zweiten Teil kam das Erbe Bürgis zur Sprache: die heutige Zeitmessung im Sportbereich, eine schweizerische Dominanz, und dann der Weg von der Quarz- zur Atomuhr. Unser Kollege Beat Jeckelmann von METAS konnte die anspruchsvolle Physik didaktisch so ge-



schickt den etwa 100 Zuhörern vermitteln, dass wir nur begeisterte Kommentare hörten.

Die Vorträge finden sie in online unter <u>https://www.jostbuergi.com/symposium/</u> und <u>https://www.jostbuergi.com/experten-workshop/</u>.



Links: Bürgis Uhren in Kassel; rechts: Detail der Mondanomalienuhr (Vortrag Michael Beck)