



The Chalmers team competing in the International Physicists' Tournament hosted by the Gothenburg Physics Centre during 8-13 April, 2017. The contestants are Henrik Gingsjö, Sanna Jarl, Martin Selin, Åke Andersson, Thana Sriviriyakul and Carl-Joar Karlsson, Image: Mia Halleröd Palmgren.

The world's best students use physics to tackle everyday problems

How can you mix the honey in your tea in the most efficient way? And how can you hear how high a popcorn is jumping? There are many everyday problems that you might not think of as challenges in physics. During the International Physicists' Tournament in Gothenburg 8-13 April some of the sharpest students in the world will solve them.

The competition gathers some of the best undergraduate and Master's students in physics from all over the world. There will be teams from 15 countries and about 150 people will take part in the fights. The different challenges during the tournament include for example jelly Lego bricks, magnets, walking chains, toy cars, popcorn, tea and much more.

All together there are 17 tricky problems to be solved. The teams have had time to prepare since July 2016. After more than eight months the students have spent several hours of their spare time to work on the solutions. Learning by doing is the method and the problems do not have obvious solutions.

"The idea with this competition is that the students work in the same way as a researcher. You need to figure out the essence of the problem, what you need to measure, how to do it and how to analyze the results. On top of that you must also be able to present your solution in an understandable way and defend your conclusions. You need different skills to manage all this, that's why it is so important with a good team work", says Andreas Isacson, one of the organizers and Professor at the Department of Physics at Chalmers University of Technology.

This is the first time The Gothenburg Physics Centre hosts the competition, which takes place at Campus Johanneberg. Since the organizing country can have two teams, Sweden is represented by one team from KTH Royal Institute of Technology and one from Chalmers.



In Gothenburg Henrik Gingsjö, Sanna Jarl, Martin Selin, Carl-Joar Karlsson, Thana Sriviriyakul and Åke Andersson are preparing for the competitions. They all study physics at Chalmers and are looking forward to the tournament.

"It is going to be great fun. I am looking forward to meeting students from so many different countries, and to exchange ideas", says Sanna Jarl, while working on the "Tea with honey" problem with the Chalmers team.

During the tournament, every team will participate in four different fights. The teams that get the highest rating from the judges will meet in the finale. The final battle will be held in the Palmstedt lecture hall on Thursday 13 April at 9 am.

Some of the teams from abroad have been working extremely hard to afford the trip to Sweden. For example, the students from Venezuela and Brazil organized crowdfunding campaigns to be able to participate in the tournament.

"We are so happy that they managed! For me this is one of the best weeks of the year: so much curiosity, energy and motivation. And it's interesting to see, that sometimes everyday phenomena which we take for granted, actually require rather complex physical reasoning if you wish to understand what is really going on", Andreas Isacsson.

Both the qualifying fights and the final are open to the public and admission is free of charge.

The International Physicists' Tournament 2017 is funded by Chalmers University of Technology and The Swedish Foundation for Strategic Research in collaboration with The Swedish Physical Society and other sponsors. The first International Physicists' Tournament was organized in Ukraine 2009.

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Read more about the International Physicists' Tournament and check out the schedule.

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