



## Press Release

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Topic:

**2020 German Physics Championship**

# Another triumph for Bayreuth's Physics Department: Bayreuth' High School Student Research Centre wins landslide victory at German Physics Championship

**A team of the High School Student Research Centre at the University of Bayreuth has emerged as the resounding winner of the 2020 German Physics Championship. The final round of this nationwide competition, GYPT (the German Young Physicist Tournament), took place from 29 February to 1 March 2020 at the Physics Centre in Bad Honnef. The team of high school students - Thomas Kornalik from Ehrenbürg-Gymnasium in Forchheim, Saskia Drechsel from Glückauf-Gymnasium in Dippoldiswalde (Saxony), and Tarik Becic from Frankenwald-Gymnasium in Kronach - won the final round against 27 other teams. The runner-up was a second team from Bayreuth including Sebastian Heiss and Emma Ingendorf from Augustinus-Gymnasium in Weiden.**

In the individual ranking, team members of Bayreuth's SFZ took all three top places. The winner was Saskia Drechsel, Thomas Kornalik came second, and third place went to Sebastian Heiss.



The GYPT-winning team (from left to right) : Saskia Drechsel from Glückauf-Gymnasium in Dippoldiswalde, Thomas Kornalik from Ehrenbürg-Gymnasium in Forchheim, and Tarik Becic from Frankenwald-Gymnasium in Kronach (from left to right, at left: Dr. Lutz Schröter, president-elect of Deutsche Physikalische Gesellschaft (DPG, German Physical Society)  
Photo: W. Zimmermann.

"In the face of such strong competition from, among other places, Munich, Berlin, and Ulm, it would be hard to imagine clearer confirmation of our promotion of excellence.

This is also a huge success for the staff of SFZ, who have been working with these high school students over the past year," says the head SFZ at the University of Bayreuth, Professor Dr. Walter Zimmermann. SFZ is a programme of Technologie Allianz Oberfranken (TAO, Technology Alliance of Upper Franconia), in which four Upper Franconian tertiary institutions cooperate: the Universities of Bamberg and Bayreuth and the Universities of Applied Science in Coburg

and Hof.



The runner-up team of the German Physics Championship was also prepared for the competition at the TAO student research centre in Bayreuth: Emma Ingendorf and Sebastian Heiss (from left), students of Augustinus-Gymnasium in Weiden. Photo: W. Zimmermann.

The German Physics Championship was similar to an international science conference: The students presented the research results they had achieved in Bayreuth in English, and then had to respond to a series of critical questions - both from competing teams and from a jury of renowned experts. "Our Bayreuth teams were especially adept in the challenging discussions; their professional and linguistic competency was simply irreplaceable", says Zimmermann.

The winning team from Bayreuth wowed the audience with a lecture about so-called "Magnetic Levitation", presented by Thomas Kornalik. Magnetic stirrers are used for different

purposes in laboratories, especially in chemical laboratories. A magnetic rod in a glass container is set in rotation by an external rotating magnetic field. Above a certain speed, the rod in the vessel can no longer keep pace with the rotating magnetic field being applied:

What then happens is the magnetic rod begins to float. As a result, the magnetic stirrer can no longer perform its actual task of mixing liquids. While Thomas Kornalik captivated the audience with his lecture, Saskia Drechsel stamped her mark on a critical discussion of a competing presentation.

Since 2019, SFZ at the University of Bayreuth has now won the German Physics Championship for the second time in a row. It is currently the most successful research centre for high school students in Germany. It has provided members of the national team participating in the International Young Physicist Tournament (IYPT) since 2014, the only high school student research centre in Germany to do so. In 2019, this team was the runner-up, finishing just behind the winning team from Singapore in the final scores. In 2020, Bayreuth's SFZ will most likely once again provide two or three national team members.

"It is a real pleasure to see our students shine in these competitions, both individually and as a team, having encouraged, challenged, and supported them over all this time. Our wish for this highly developed country, and the upcoming generation, is that as many ambitious young people as possible seek challenges and 'can-do' qualities in the fields of science and technology. Protests and complaining alone will not help us build a future. I can only advise our nation to foster and challenge young talent at an early stage, like with this competition, because no amount of research and technology initiatives from the federal and state governments will amount to anything without these young people," says Zimmermann.

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**About TAO**

The Universities of Bayreuth and Bamberg and the Universities of Applied Sciences Coburg and Hof have joined forces in TechnologieAllianzOberfranken (TAO, Technology Alliance of Upper Franconia). Their goal is to advance Upper Franconia's status as a centre of science. The focus of this joint-venture is on the areas of energy and transportation. With regard to studies, emphasis is placed very much on the development of cross-university teaching and study programmes, as well as cooperative doctorates. TAO is supported by the Free State of Bavaria.

**The University of Bayreuth at a glance**

Founded in 1975, the University of Bayreuth is currently one of Germany's most successful young universities. In the Times Higher Education (THE) Young University Rankings, it is ranked 40th among the 351 best young universities in the world. Interdisciplinary research and teaching is the main feature of the University's 160 degree programmes offered by seven faculties covering the natural sciences, engineering, law and economics, languages, literature, and cultural studies. Bayreuth University has approx. 13,330 students, 240 professors, 1,330 academic staff members, and about 985 non-academic staff members. It is the largest employer in the region. Status: January 2020