## Informationen

## Requirement

Enrollment as a student at an European university inside the Schengen area.

#### Financing and accommodation

PTB will sign an internship contract, with a lump sum payment of 600 euros per month, with all accepted candidates for a research internship. PTB also offers a travel (arrival and departure) subsidy for all participants who live further than 30 km - inside Germany up to 150,-€, for international travels up to 300,-€ away - and can cover the costs of accommodation in a student residence hall in Braunschweig.

Please specify in your application if you will need to take off some days for examinations.

#### Directions

PTB has two sites: Berlin and Braunschweig. MetroSommer 2023 will take place at the main site in Braunschweig. Braunschweig is one of Europe's most

popular research regions - with diverse research centers and researchers from a wide range of disciplines. .

PTB Braunschweig is found in the northwest part of the city between Watenbüttel and Lehndorf (www.ptb.de/cms/ueberunskarriere/ueber-uns/ptb-in-braunschweig.html). For automobiles, PTB is about 10 minutes from the A2 motorway. You can also use public transportation. Starting from the train station or the city center, you can use bus lines 461 or 433, respectively; each stop at PTB's main entrance and take roughly 30 minutes. Further information about bus schedules can be found on the Braunschweiger Verkehrs-GmbH's website (www.verkehr-bs.de/fahrplan.html) or in the timetable app (Fahrplan-App) (https://www.verkehr-bs.de/fahrplan/fahrplan-app.html).

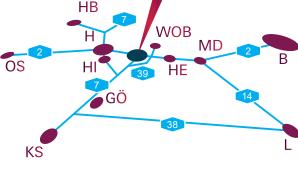








Braunschweig HB **WOB** MD **∡**GÖ





Physikalisch-Technische Bundesanstalt Bundesallee 100 38116 Braunschweig

Prof. Dr. Tanja Mehlstäubler **QUEST Centre for Quantum Engineering** and Space-Time-Research

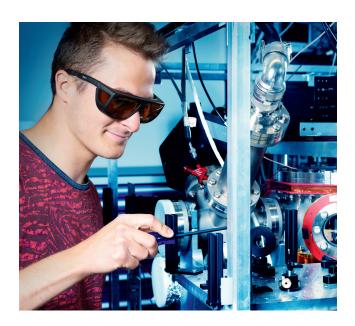
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As of: 12/2022



Experience the most accurate summer of your life! We are offering one month of cutting-edge research at the Physikalisch-Technische Bundesanstalt (PTB) in Braunschweig. PTB, Germany's national metrology institute, is among the top names in the international world of metrology – the science of correct and accurate measurement.

Here at PTB, you can encounter groundbreaking research and technology transfer to industry. The current topics are **energy and environment**, **quantum technologies**, **digitalization**, **legal and international metrology**, **and the new System of Units**. This is where the measurement procedures of tomorrow are being developed, characterized, and pushed forward in cooperation with industry. At PTB time comes from atomic clocks, length is measured far into the nano-world, and currents are produced by single-electron sources. This unique range of topics and the first-class technological equipment of PTB are the foundation of innovative research – **not just for physicists**, **but also for students in other scientific disciplines such as computer science**, **electrical engineering**, **mechanical engineering**, **and chemistry**.



# Experience one month of research

From fundamental research to technical cooperation – if you are excited about working side by side with highly qualified colleagues for one months to solve interesting problems, you will find a suitable project here. The available topics range from the **development of measurement devices for ionizing radiation to researching ultra-stable lasers and optical clocks to determining the SI unit meter**. These research projects will help you to solve economic and societal problems – in the fields of climate protection, medicine, efficient energy use, or new technological procedures, for example – but also to steer your career in research in the right direction.

A research internship at PTB, MetroSommer, is intended for all university or technical university students who are studying STEM subjects. Candidates need to be enrolled between the third semester of a Bachelor degree and second semester of a Master degree. Furthermore, you may so far not have participated in an internship at any institution of German federal public service.

In case your university requires more than 4 weeks of intending duration to be accredited, a prolongation of the lab work to 8 weeks to September 2023 is possible. Please indicate this in your application.

The lectures, labtours and social events will take place between 01 August and 31 August 2023.



## Apply now!

### Why should I apply?

- Are you interested in meeting other STEM students from all over Germany and Europe?
- Would you like to learn more about exciting topics such as atomic clocks, modern quantum technologies, gravitational wave measurements, or magnetism?
- Have you always wondered how we at PTB are achieving the realization of the new System of Units?
- Do you want to have unique insight into cutting-edge research at a national metrology institute?
- Are you interested in accurate measurement procedures and measurement technology?
- Are you interested in transfer of technology and how economic and societal problems can be solved through technology?

If yes, MetroSommer is perfect for you!

## How do I apply?

There is an online application form as well as a list of all of the offered internship projects on the MetroSommer website (www.ptb.de/metrosommer). Which internships are the most interesting is up to you. Please choose three topics on which you would like to participate in research.

Your application must include the following:

- a letter of motivation
- a CV in tabular form
- a copy of your Highschool certificate and, if applicable, a copy of your Bachelor's degree or transcript of records
- an enrollment certificate (Immatrikulationsbescheinigung)
- $\bullet \ \ proof of health insurance coverage$

The application period is from 17 January to 1 March 2023. We will inform you, if you have been selected by the end of March 2023.