



26. Deutsche Physikerinnentagung

German Conference of Women in Physics

Conference Program 24th to 27th November 2022



Imprint

Department of Physics
Karlsruhe Institute of Technology KIT
Wolfgang-Gaede-Str. 1
D-76131 Karlsruhe

Contact: dpt2022org@lists.kit.edu

Website: www.physikerinnentagung.de

Design and v.i.S.d.P. Greta Heine

Printery

WIRmachenDRUCK GmbH
Mühlbachstr. 7
71522 Backnang
Deutschland

Klimaneutraler Druck

Date

November 2022



Karlsruhe Institute of Technology



Welcome!

Welcome to the **26th German Conference of Women in Physics**

Dear participants of the DPT 2022, dear physics community,

it is a great honor to host the 26th German Conference of Women in Physics (DPT) at Karlsruhe Institute of Technology (KIT). As "The Research University in the Helmholtz Association", we put a very high priority on actively promoting equal opportunities for women and men; because only a diverse scientific landscape is a strong scientific landscape.

After all, science thrives on different opinions, perspectives, and expertise. The global challenges of our time, such as resilient energy supplies, the climate crisis, or future mobility, can only be handled with the support of science. As we all know, bright minds come in all sizes, shapes and genders – without doubt, diversity and equal opportunities are absolutely indispensable if we are to really attract the best minds to research.

KIT strives to achieve the goal of equal opportunities with numerous measures. Some are already established, and some new, innovative activities are being implemented within the framework of the KIT Excellence Strategy; these are the Gender Equity 2 program, which focuses on the recruitment of female professors and networking between female scientists, and the 100 Professorships Program, which specifically aims at a 40 percent share of women among newly appointed professors. It is our goal that at least one in five professorships at KIT is held by a woman by 2030.

At present, however, the reality, especially in the field of science, technology, engineering and mathematics (STEM) as a whole and also in physics, is unfortunately very different: While still slightly more than a quarter of those who complete a physics degree at KIT are women, the share of women among those who completed their PhDs at KIT in 2021 was only 16 percent and the share of professorships in physics that were held by women was only 14 percent. This clearly shows, of course, that our efforts need to be further intensified.

In order to win more female students for the subject of physics, it is essential to present the requirements of such a course of study realistically, and to show the extremely wide range of focal points and fields of application that are possible with a degree of this kind. At KIT, we engage study ambassadors for this purpose: These are (mainly) female students of STEM subjects, who give lectures in schools and report on their experiences during their studies. In this way, they spread their enthusiasm for the STEM subjects to school classes – and they also demonstrate that, contrary to existing prejudices, femininity and scientific talent go very well together. In order to hold young female scientists in the system, appreciation, career development support, and networking have proven to be essential elements.

The DPT contributes significantly to these two essential points of action: Numerous highly respected female physicists enrich the conference. The entire spectrum of physics can be experienced in specialist lectures as well as in exchanges with company representatives. Part of the program is aimed specifically at schoolchildren. The top-class research facilities of KIT – KATRIN, HoreKa, KARA, and FLUTE - present hands-on physics. Especially young female scientists (not only from KIT) will have the opportunity to present and discuss their research; and career-related aspects as well as networking will, of course, again play an important role at this year's DPT.

A very special thank you goes to all of those who have made the DPT 2022 at KIT possible and who have shown such great dedication.

On behalf of the entire Executive Board of KIT, I wish you all wonderful, enriching days and an exciting professional exchange at the DPT 2022!



Professor Dr.-Ing. Holger Hanselka

President of the KIT



Welcome by the Head of **Division 5 - Physics and Mathematics**

Dear Participants,

I am delighted to welcome you at KIT.

Physics research and teaching at KIT are broadly positioned, ranging from particle and solid-state physics to geophysics, meteorology, and astroparticle physics. This is complemented by numerous connections to other disciplines such as electrical engineering or informatics and, of course, mathematics.

At KIT, we operate large-scale research facilities and develop most sensitive instruments to understand the elementary building blocks of matter, our Earth, but also the largest structures of the universe. At the same time, we contribute to solving the urgent questions of humanity relating to e.g. energy supply, climate protection and modern quantum and information technologies.

All of this is only possible through the cooperation of people from different disciplines and at all stages of their academic careers, from students to academic staff to professors.

Physics thrives on the creativity of physicists who, in international exchange, contribute to a deeper understanding of nature, to technical progress and to the sustainable development of our society.

To this end, we need everyone who is enthusiastic about the exciting field of physics. We encourage women in particular to take an interest in studying physics and to do a doctorate after graduation.¹

It is a special concern of mine that many women decide to pursue a career in science.

I am very pleased that KIT is hosting the German Conference of Women in Physics this year and wish you all an interesting and stimulating conference.

Prof. Dr. Marc Weber

Head of Division V – Physics and Mathematics



Welcome by the Organizing Team of the **26th German Conference of Women in Physics!**

Dear physics enthusiasts,

The organizing committee of the 26th German Conference of Women in Physics (DPT) welcomes you warmly to the Karlsruhe Institute of Technology!

The DPT 2022 will be held for the first time at our university, which is part of the Helmholtz Association. We are particularly proud to announce a wealth of scientific talks, exhibitions and workshops, to name but a few, hoping to appeal to a wide variety of target groups. The event will take place from 24th to 27th November 2022.

The opening lecture of the DPT on "Flavour anomalies - a first glimpse to new physics phenomena?" will be held by Stephanie Hansmann-Menzemer from the University of Heidelberg on 24th November 2022. At the reception afterwards, there will be the first possibility to get acquainted with the other participants.

During the following three days, exciting lectures on physics, geophysics, and meteorology will be given by established, top-class female scientists, as well as by young female scientists of KIT and several other top universities, colleges, and research institutions.

Increasing the visibility of young female scientists and supporting their career path is one of the core purposes of this conference. To that end, we have a selection of events bringing young female scientist into focus, such as a scientific poster session and accompanying career workshops. Furthermore, representatives from companies and research institutions will provide insights into their everyday professional lives and alternative/complementary career opportunities, such as in the "Professional Talks" seminar, as well as in the panel discussion "Female physicists in leadership positions - pathways and challenges", which will take place on Saturday evening. Even the younger generation will be involved in the conference with a workshop and two specialist talks for pupils on Saturday.



You can explore the excellent research infrastructure at KIT during the guided laboratory tours on Friday to the Karlsruhe Tritium Neutrino Experiment (KATRIN), the supercomputer HoreKa, the Karlsruhe Research Accelerator (KARA), and the Far-Infrared Linac and Test Experiment (FLUTE). In addition, the outstanding research groups, networks and research training groups of KIT, in the field of physics, as well as the KIT Center KCETA together with many companies will present themselves to the participants at the "Market Place" which will be held on Saturday.

The program is completed by several gender talks as well as the accompanying exhibition "Lise Meitner and her daughters", presenting not only Lise Meitner but also many other biographies of German and Austrian female role models in physics. There will be plenty of time for informal exchanges and networking during the coffee breaks, lunch breaks and the conference dinner, as well as the social program.

Without the financial support of numerous internal and external sponsors, the realization of this conference at KIT would not have been possible. Therefore, we would like to take this opportunity to express our sincere thanks to the sponsors of the DPT! (You will find an overview of them here in the program booklet as well as on our website www.physikerinnentagung.de.) We would especially like to thank KIT, Division V, the Department of Physics, and the Physics Student Body for their extensive support on various levels.

We wish you, dear readers, wonderful, insightful and exchange-rich days at KIT or, for those of you who will participate purely online, at your computers!

On behalf of the entire organizing committee,



Prof. Dr. Milada Margarete Mühlleitner

Jasmin Aghassi (INT)
 Duarte Azevedo (IAP)
 Heike Boos (STAB)
 Céline Brunner (student)
 Max Burkardt (student)
 Yolita Eggeler (LEM)
 Fiona Ellwanger (student)
 Dima El Khechen (LAS)
 Lena Feld (IMK)
 Caroline Fengler (ETP)
 Torben Ferber (ETP)
 Sören Finna (Fachschaft)
 Gerda Fischer (PHI)
 Jingya Gao (student)
 Michelle Gensmann (Fachschaft)
 Ellen Gottschämmer (MACH)
 Jasmin Häberle (student)
 Andrea Santamaria Garcia (LAS)
 Isabel Haide (ETP)
 Daniel Hauck (TFP)
 Greta Heine (ETP)
 Gudrun Heinrich (ITP)
 Hanna Sofia Henke (student)
 Corinna Hoose (IMK)
 Donghwa Kang (IAP)
 Katrin Klünk (PEBA)
 Piccioni Koch (SCC)
 Sofia-Katerina Kufner (GPI)
 Lina Kuhn (TFP)
 Lucas Kunz (ITP)
 Katerina Kusakova (IMK)
 Tim Leidel (Fachschaft)
 Sara Martinelli (IAP)
 Edyvania Emily Pereira Martins (ETP)
 Elina Merkel (student)
 Christine Meyer (Bosch)
 Milada Margarete Mühlleitner (ITP)
 Natalia Müller (INE)
 Svenja Müller (student)
 Britta Nestler (IAM)
 Miriam Novotny (student)
 Maria Paszkiewicz (TFP)
 Daniela Piccioni Koch (SCC)
 Tim Reimus (Fachschaft)
 Sophia-Marie Roßnagel (PEBA)
 Roxane Soergel (PEBA)
 Sonia Sortan (GPI)
 Slavomira Stefkova (ETP)
 Lucas Steib (Fachschaft)
 Komal Tauqeer (ETP)
 Victoria Tokareva (IKP)
 Kathrin Valerius (IAP)
 Cleo Völker (Fachschaft)
 Belina von Krosigk (IAP)
 Kristin Willa (IQMT)
 Felix Niklas Wüst (student)
 Andreas Zeh-Marschke (student)
 Roswitha Zeis (HIU)
 Maryam Ramezani Ziarani (IMK)
 Anna Zimina (IKFT)

Organizing Team



Table of Contents

Welcome to the 26th German Conference of Women in Physics!	1
Welcome by the President of KIT	1
Welcome by the Head of Division 5 – Mathematics and Physics	3
Welcome by the Organization Team	4
General Information	6
The CARE Team	7
Practical Information about the DPT 2022	8
The Conference Venue	10
Lise Meitner Exhibition	11
Information on Food	12
Thursday Program	14
Welcome and Reception	14
Opening Lecture	15
Friday Program	16
Bus Transfer, Access to Campus North and Public Transportation	17
Keynote Physics Talks	18
Physics Talks	20
Guided Tours at KIT Research Facilities	22
Physics and Profession 1	24
Workshop 1,2	25
Keynote Gender Talks & Gender Projects	26
Social Program	28
Code of Conduct	30
Saturday Program	35
Keynote Physics Talks	36
Physics Talks	38
Poster Session	40
Physics and Profession 2, 3	46
Arbeitskreis Chancengleichheit Informationsveranstaltung und Mitgliederversammlung	48
Workshops 3,4	49
Market Place	50
Panel Discussion – Female Physicists in Leadership Positions	51
The Conference Dinner	52
Sunday Program	54
Keynote Physics Talks	56
Physics Talks	58
Physics and Profession 4,5	60
Workshops 5,6	62
Sponsors and Support	64
Campus Plans	65

The CARE Team



We are there for you when

you have experienced harassment or discrimination

• • • • •



We are there for you when

your personal boundaries have been disregarded

• • • • •



We are there for you when

you perceive (acute or structural) discrimination from other participants

• • • • •



We are there for you when

you feel uncomfortable

• • • • •



We are there for you when

you simply need a person to talk to

• • • • •



The CARE Team will wear yellow badges (thus can be easily identified) and wander around the conference so that they can be directly contacted.

In any case, you can of course also contact the CARE team via email: dpt2022careteam@lists.kit.edu

Practical Information about the DPT 2022

Conference Office & Storage Room

At the conference office you can register as a participant. You can consult the team of the conference office also for all organizational questions.

It is open during the following hours:

CS = Campus South, CN = Campus North

Day	Campus, Building	Room	Hours
Thursday	CS, Studentenhuis	Festsaal Foyer	15:30-19:30
Friday	CN, FTU Building 101	156	8:00-18:00
Saturday	CS, Building 30.22	229.4	8:30-19:00
Sunday	CS, Building 30.22	229.4	8:30-17:00

During registration you will receive the conference badges and information material about the conference. Additionally, you need to register for access to Campus North.

The conference office can be used to put luggage that you do not want to carry around during the conference. However, we don't take liability over stored items. Please make sure to pick up your luggage at the end of the day before the conference office closes.

Resting/Email Areas

There are rooms available where participants can rest or write emails etc. during the conference. These are:



Day	Building	Room	Hours
Friday	CN, Building 419	104	11:00-16:00
	CN, SCC Building 449	235	Full day
Saturday & Sunday	CS, Building 30.22	Kl. Hörsaal B	12:30-20:00
Sunday	CS, Building 30.22	229.3	12:30-20:00

CS = Campus South, CN = Campus North

Internet Access / Wi-Fi



Wi-Fi internet access is available for each conference attendee. The wi-fi "eduroam" can be used as usual by every member of the eduroam network. In addition, a fast city-wide internet connection ("KA-WLAN") with several access points in the city and on campus can be used. Please follow the instructions given when connecting.

Notes for Speakers

Every dedicated room for talks is equipped with a video projector, a computer, laser pointers, camera, microphones and loudspeakers. For the smooth transition between talks and interface with the Zoom sessions, personal laptops will not be allowed for the purpose of presenting. The file with the presentation should be transferred via USB-stick or e-mail to the computer of the room on time, i.e. at least 10 minutes before the beginning of the given session. To do so, please contact the helpers in charge before the beginning of the session. For the presentations, the computers are provided with PowerPoint/OpenDocument editors/presenters and with a PDF viewer. We would like to recommend the speakers to check their presentation on the dedicated room computer before the beginning of the session.

Covid



As the official provisions concerning the Covid-19 pandemic may change on short notice, please catch up on them at the following website: <https://www.baden-wuerttemberg.de/en/service/aktuelle-infos-zu-corona/corona-information-in-other-languages>



Photography

The group photo of the conference will take place in Festsaal on Thursday at 19:45. Everyone who does not want to appear on the group photo that will be used for publicity purposes should not join it. The same applies for reportage photos that will be taken by a professional photographer on Thursday and on Saturday afternoon. Please tell the photographer directly if you don't want to appear on photos knowing that they will be used for publicity purposes. There will also be signs to make clear where you have to be aware that photos are being taken.

We also have a photographer for more artistic photos and video clips at the conference. Michael Hoch is a Senior Scientist and creator of the art@CMS and ORIGIN program, an international transdisciplinary science and art engagement and networking program with the special emphasis in education. He will ask some participants to portray them in photos and small video statements with the aim to promote women in science to inspire more to choose an exciting career in the academic or High Tech industry. With the portrait photos we will create an impressive collage emphasizing the diversity of creative women in our fields and the short video clips will be used on social media to give an inside view on their own personal motivation working in science and technology.



The Conference Venue

Karlsruhe and the KIT



The conference will be hosted by the Karlsruhe Institute of Technology and will take place in the premises of Campus South on Thursday (Adenauerring 7, 76131 Karlsruhe), Saturday and Sunday (Building 30.22, Engesserstraße 7, 76131 Karlsruhe), and on Campus North (Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen) on Friday.

Campus South is located near the city center of Karlsruhe and can be easily reached by suburban train, tram and/or bus from the Karlsruhe main train station (~15 minutes). Campus North is located 10 km away from the city, next to the town of Eggenstein-Leopoldshafen. It can be reached by car or bus from the center of Karlsruhe (~30 minutes). The organizers of DPT 2022 will provide bus connections between Campus South and Campus North on Friday for the convenience of the participants.

Karlsruhe Institute of Technology (KIT)

The Karlsruhe Institute of Technology (KIT; Karlsruher Institut für Technologie) is a public research university in the German federated state of Baden-Württemberg and a national research center in the Helmholtz Association that is one of the largest educational institutions and the largest research institution by funding in Germany. KIT was established in 2009 when the University of Karlsruhe (Universität Karlsruhe), founded in 1825 as a public research university (also known as the "Fridericiana"), merged with the Karlsruhe Research Center (Forschungszentrum Karlsruhe), which had originally been established in 1956 as a national nuclear research center (Kernforschungszentrum Karlsruhe, KfK).

KIT is a member of the TUg – an incorporated society of the largest and most notable German institutes of technology. Within the framework of the "German Excellence Initiative", KIT was one of three universities which received excellence status in 2006. In the following "German Excellence Strategy", KIT was awarded as one of eleven "Universities of Excellence" in 2019. KIT is among the leading technical universities in Germany and Europe and established the first German faculty for computer science in 1972. According to different bibliometric rankings, KIT is the German university with the strongest research in engineering and natural sciences.



Lise Meitner Exhibition

Exhibition dates: 21st November to 19th December 2022

Place: KIT Campus South, CFN Foyer (building 30.25)

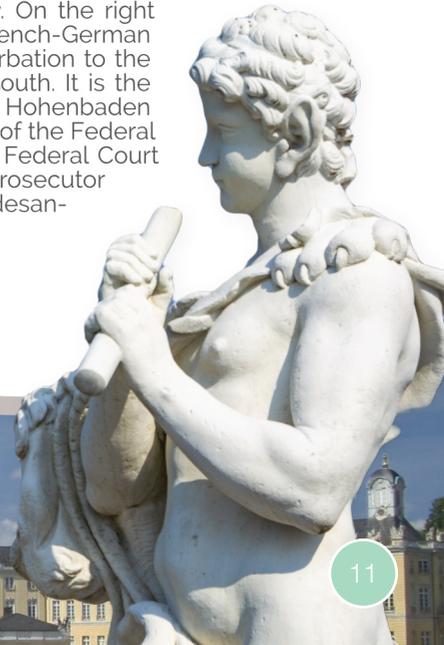
Lise Meitner and 'her daughters': Women physicists introduce themselves

The exhibition has been created to show appreciation for Lise Meitner, an outstanding Austrian-Swedish physicist, one of those responsible for the discovery of the nuclear fission. She was the first woman to become a full professor of physics in Germany, and as such, a wonderful example of a woman paving her way to science, in spite of gender-specific barriers. Along with her, the stories of other eminent female scientists are presented in the form of posters. The aim of the exhibition is to encourage young people to get involved in physics and other STEM disciplines.



Karlsruhe

Karlsruhe is the third-largest city of the German federated state of Baden-Württemberg after its capital of Stuttgart, and Mannheim. Its 308,436 inhabitants make it the 21st-largest city of Germany. On the right bank of the Rhine, the city is located near the French-German border, between the Mannheim/Ludwigshafen conurbation to the north, and the Strasbourg/Kehl conurbation to the south. It is the largest city of Baden, a historic region named after Hohenbaden Castle in the city of Baden-Baden. The city is the seat of the Federal Constitutional Court (Bundesverfassungsgericht), the Federal Court of Justice (Bundesgerichtshof) as well as the Public Prosecutor General of the Federal Court of Justice (Generalbundesanwalt beim Bundesgerichtshof).





Information on Food

Where and what to eat at the Conference

Coffee Breaks



On Friday the coffee breaks will be offered in the rooms where the talks and workshops will take place.

On Saturday and Sunday the coffee breaks will be offered in the foyer on the first and second floor of building 30.22 where the conference will be held on that day.

Our special thanks go to the sponsors of the coffee breaks, Leica Microsystems GmbH and Institute for Astroparticle Physics (IAP), KIT!

Lunch Breaks and Restaurant Suggestions

Please note: While lunch is available on Friday in the canteen of Campus North (Casino) and will also be offered in buildings 348 and 449 (SCC building), you will have to provide your own food during the lunch breaks on Saturday and Sunday.

Here are a few restaurant tips for you within walking distance from the event location:

Verde Restaurant & Ice-Cream Manufactory

€€ 🌐 Diverse 🚶 7 min

At Verde Restaurant you can get vegan salads, burgers and pasta.

Open: Sat & Sun from 11:00 until night

Where: Kaiserstraße 101

Web: <https://restaurant-verde.eatbu.com>

Restaurant Continent

€ 🌐 Indian 🚶 8 min

Here you can find a large Indian buffet, a salad and a dessert bar. You can also order dishes à la carte – including vegetarian and vegan ones.

Open: Sat & Sun from 11:30 until night

Where: Kaiserstraße 109

Web: <https://www.restaurantcontinent.de/>

Oxford Pub

€ 🌐 German/English 🚶 8 min

In a homey pub atmosphere with deep leather chairs you can enjoy sausage salad and burgers, among other things.

Open: Sat from 11:30 until night, closed on Sun

Where: Fasanenstraße 6

Web: <https://www.oxfordpub.de>

Restaurant MultiKulti

€€ 🌐 Diverse 🚶 9 min

The restaurant offers pub meals with an international touch in a friendly place.

Open: Sat & Sun from 10:00 until evening

Where: Schlossplatz 19

Web: <https://www.multikulti-ka.de>

Vogelbräu Karlsruhe

🇩🇪 €€ 🌐 German 🚶 10 min

Brewery pub where you can enjoy in-house beers and small dishes with a direct view of the brew kettles.

Open: Sat & Sun from 10:00 until night

Where: Kapellenstraße 50

Web: <https://www.vogelbraeu.de>

L'Osteria

🇩🇪 €€ 🌐 Italian 🚶 11 min

Try pizza, fresh pasta from the in-house pasta factory, daily freshly prepared antipasti or various salads.

Open: Sat from 11:00, Sun from 12:00 until night

Where: Zähringerstraße 69

Web: <https://losteria.net/de/restaurants/restaurant/karlsruhe>

Restaurant Marktlücke

🇩🇪 €€ 🌐 German 🚶 11 min

Here you get Baden and Swabian cuisine - regional, fresh and delicious.

Open: Sat from 11:30 until night, closed on Sun

Where: Zähringerstraße 96

Web: <http://www.karlsruhermarktluecke.de>

Café Palaver

🇩🇪 €€ 🌐 Diverse 🚶 11 min

Pasta and Asian dishes are offered in this simple café with international cuisine and a nice garden.

Open: Sat & Sun from 10:00 until 16:00

Where: Steinstraße 23

Web: <http://www.cafepalaver.de>

Restaurant VietAroma

🇩🇪 €€ 🌐 Vietnamese 🚶 13 min

This Vietnamese restaurant stands for fresh, healthy cuisine from the Far East.

Open: Sat & Sun from 11:30 until night

Where: Gottesauer Straße 19

Web: <https://www.vietaroma.de>

Restaurant Weinstube Oberländer

🇩🇪 €€€ 🌐 European 🚶 14 min

Here you can enjoy upscale European dishes and wines in a 19th century building with a green courtyard.

Open: Sat from 12:00 until 15:00, closed on Sun

Where: Akademiestraße 7

Web: <https://oberlaender-weinstube.de>

Yangda Restaurant

🇩🇪 €€ 🌐 Chinese 🚶 14 min

Authentic chinese food. Advice: order multiple dishes and share them.

Open: Sat from 11:30 until night, Sun 11:30-15:00

Where: Kaiserstraße 114

Web: <https://www.yangda-karlsruhe.de>

Restaurant Mogogo

🇩🇪 €€ 🌐 Eritrean 🚶 15 min

Enjoy culinary dishes and drinks from Eritrea in a pleasant and friendly atmosphere.

Open: Sat from 18:00-22:00, Sun from 12:00 to 14:30

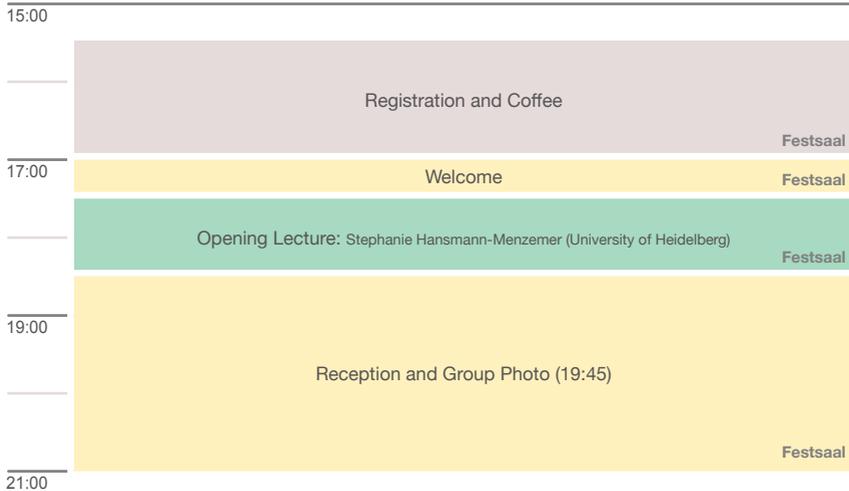
Where: Stephaniestraße 2A

Web: <http://www.restaurant-mogogo.de>



Program

Thursday 24/11 (Campus South)



Welcome and Reception

At 17:00 you will be officially welcomed by

- Prof. Dr. Holger Hanselka, President of KIT,
- Bettina Stark-Watzinger, Federal Minister of Education and Research and patron of this year's DPT (video greeting),
- Gabriele Luczak-Schwarz, first mayor of the City of Karlsruhe, responsible for science, among other things (video greeting)
- Agnes Sandner, speaker of the AKC, the Working Group on Equal Opportunities of DPG,
- Prof. Dr. Milada Margarete Mühlleitner, Head of the Institute for Theoretical Physics, responsible for equal opportunity at the faculty of physics, speaking in the name of the whole organization committee.

After the opening lecture, you can casually get to know other participants at the reception while finger food will be offered.

Program

Friday 25/11 (Campus North)

7:00	Commuting by bus: Campus South to Campus North			
9:00	Physics Talks: Geophysics FTU Aula	Physics Talks: Solid State Theory 401	Physics and profession 1 419	Workshop 1: Selbstmarketing für Wissenschaftlerinnen SCC
	Coffee Break			
11:00	Keynote Physics Talk: Geophysics FTU Aula	Keynote Physics Talk: Solid State Exp 401	Workshop 1: Selbstmarketing für Wissenschaftlerinnen SCC	
	Keynote Physics Talk: Meteorology/Atmosph. Physics	Keynote Physics Talk: Solid State Theory 401		
13:00	Lunch Break (Canteen „Casino“ / Building 348 / SCC)			
15:00	Tour 1: KATRIN	Guided Tour 2: KARA & FLUTE	Tour 3: HoreKa	Gender KN Talk: Fight for equity FTU Aula
	Tour 1: KATRIN		Tour 3: HoreKa	
	Tour 1: KATRIN	Guided Tour 2: KARA & FLUTE	Tour 3: HoreKa	Gender KN Talk: Gender in physics FTU Aula
	Tour 1: KATRIN		Tour 3: HoreKa	
	Coffee Break			
17:00	Physics Talks: Meteorology 401	Physics Talks: Solid State Experiment FTU Aula	Workshop 2: Self-marketing: Putting your best self forward SCC	Gender Projects 419
	Commuting by bus: Campus North to Campus South			
19:00	Social Program Meeting at Bus Stop			
21:00				

Bus Transfer and Access to Campus North on Friday

On Friday the program will be located at KIT Campus North, 10 km north of Karlsruhe.

Campus North
Karlsruhe Institute of Technology (KIT)
Hermann-von-Helmholtz-Platz 1
76344 Eggenstein-Leopoldshafen

We offer a free transport between KIT Campus South and Campus North. Campus South: Departure from Campus South will be next to the Karlsruhe Castle, Schlossbezirk, near buildings 20.11 respectively 20.14 at 8:00. Please be on time. See map on last page.

During registration you will receive an access card. Please note that you cannot enter Campus North without the access card. If you are not able to make your registration on Thursday, there is a possibility to register on Friday morning. The conference office will have an additional location at the registration office of FTU (CN, building 101, room 156). The building of FTU is in front of the gate on the left hand side.

For the departure from Campus North back to Campus South, the buses leave between 18:00 and 18:30 in front of the FTU building. Please be on time. See map.

Public Transportation

The Campus South is located in the city center of Karlsruhe and can easily be reached by public transport. The closest stops are "Durlacher Tor/KIT-Campus Süd" and the two stops at "Kronenplatz".

The Campus North is located in Eggenstein-Leopoldshafen. If you cannot take the bus transfer of the conference on Friday, you can use the tram (S1/11 or S2) and change into the bus number 195 to reach the stop "KIT-CN Südtor". The bus goes 2-3 times per hour in both directions.



Keynote Physics Talks

How can seismological observations inform us about physical processes across the scales?

Celine Hadziioannou (University of Hamburg)

The ambient seismic wave field carries information about the sources that excited it, and about the material that it passed through. By recording and carefully analyzing the seismic 'background noise', we can learn many things about physical processes on Earth and beyond. For example, the most prominent seismic noise comes from interactions between ocean waves and the solid Earth. Therefore, it carries the imprint of storms, of weather over the oceans and seas, and even of the tides. The seismic noise field also carries the imprint of structures it has passed through, and changes therein. I will show that useful signals can be extracted from ambient noise, which can then be used to monitor material changes with high temporal resolution. Thanks to recent sensor developments, we can use telecommunication fiber for seismo-acoustic measurements with unprecedented spatial and temporal resolution. This type of measurement offers high potential for seismic measurements to support high precision physical experiments, accelerators, and gravitational wave detectors. Over the past decade, the use of seismic noise has found its way into applications across temporal and spatial scales. I will give an overview of current applications as well as a quick peek into future developments.

Friday
11:00 - 11:45

FTU Aula
Campus North

Category: Geophysics

Aerosol-cloud-climate cooling as a data-driven dynamical system

Franziska Glassmeier (TU Delft)

Anthropogenic drivers of the climate system not only include greenhouse gases but also particulate air pollution. These anthropogenic aerosols exert a net cooling effect so that they partially mask greenhouse-gas warming. The magnitude of this effect is a major uncertainty for climate projections. The dominant mechanism behind this uncertainty is the response of clouds to aerosol perturbations, especially of cloud decks over the subtropical oceans. These clouds cool the planet by reflecting sunlight back to space and aerosols modulate their reflectivity and amount. We will discuss how the dynamics of cloud decks can be characterized as a data-driven dynamical system. Our emphasis will lie on the role of different timescales of the cloud response to aerosols, and why "opportunistic experiments" like the bright tracks that ship exhaust can create in overlying cloud decks do not tell the whole story of aerosol-cloud climate cooling.

Friday
11:45 - 12:30

FTU Aula
Campus North

Category: Meteorology / Atmospheric Physics

Topology and Chirality

Claudia Felser (Max Planck Institute for Chemical Physics of Solids, Dresden)

Topology, a well-established concept in mathematics, has nowadays become essential to describe condensed matter. At its core are chiral electron states on the bulk, surfaces and edges of the condensed matter systems, in which spin and momentum of the electrons are locked parallel or anti-parallel to each other. Magnetic and non-magnetic Weyl semimetals, for example, exhibit chiral bulk states that have enabled the realization of predictions from high energy and astrophysics involving the chiral quantum number, such as the chiral anomaly, the mixed axial-gravitational anomaly and axions. The potential for connecting chirality as a quantum number to other chiral phenomena across different areas of science, including the asymmetry of matter and antimatter and the homochirality of life, brings topological materials to the fore.

Friday
11:00 - 11:45

Building 401, Room 410
Campus North

Category: Solid State (Experiment)

Quantum materials design: challenges and opportunities

Roser Valenti (Goethe University Frankfurt)

Unconventional superconductivity with high critical temperatures, frustrated magnetism, spin-liquid phases or the recently discussed Kitaev phases are a few examples of exotic states in correlated quantum materials.

One of the big challenges in quantum physics is the microscopic description of such materials. Moreover, being able to understand them implies the possibility of predicting compounds with desirable properties.

In this talk, I will present and discuss strategies for designing quantum materials from first principles and their connection to experimental observations.

Friday
11:45 - 12:30

Building 401, Room 410
Campus North

Category: Solid State (Theory)



Physics Talks

Physics Talks Geophysics

- Exploration of sub-marine resources using electromagnetic methods – Katrin Schwalenberg (Bundesanstalt für Geowissenschaften und Rohstoffe)
- Effects of seismic anisotropy and attenuation on first-arrival waveforms recorded at the Asse II nuclear repository – Sonia Sortan (KIT)
- Seismic Anisotropy Tomography from Glacial Microseismicity: an Antarctic Example – Sofia-Katerina Kufner (KIT)
- Fiber optic distributed acoustic sensing of local earthquakes at BFO – Nasim Karamzadeh Toularoud (KIT)
- Distributed seismic sensors for Newtonian Noise Cancellation in Gravitational Wave Detectors – Katharina-Sophie Isleif (Helmut-Schmidt-University)

Friday
9:00 - 10:30

FTU Aula
Campus North

Physics Talks Solid State Theory

- Building Blocks for Cluster Mott Insulators – Vaishnavi Jayakumar (University of Cologne)
- Magnetic states and high-pressure enthalpy landscape of manganese sulfide polymorphs: a first-principles study – Maribel Núñez-Valdez (Helmholtz Zentrum Potsdam (GFZ)/Goethe University Frankfurt am Main)
- Analogues of light and gravity in the collective excitations of quantum magnets – Leilee Chojnacki (OIST)
- Quantum critical Eliashberg theory in a finite dimensional SYK model – Veronika Stangier (KIT)
- Influence of Coulomb correlations on high harmonic generation in monolayer TMDC materials – Josefine Neuhaus

Friday
9:00 - 10:30

Building 401, Room 410
Campus North



More Information
& full abstracts

physikerinnentagung.de



Timetable

Physics Talks

Meteorology and Atmospheric Physics

Friday
16:30 - 18:00

Building 401, Room 410
Campus North

- Why can we trust climate model simulations of ozone depletion chemistry?
– Laura Saunders (University of Toronto)
- Mixed-phase clouds: a journey between observations and climate models
– Olimpia Bruno (KIT)
- Microphysical pathways active within thunderstorms and their sensitivity to CCN concentration and wind shear – Corinna Hoose (KIT)
- Further characteristics of the atmospheric turbulent wind: Periods of constant wind speed and waiting times between gusts – Daniela Moreno (University of Oldenburg)
- Recent progress in the traceRadon project: Measuring outdoor Radon down to lowest activity concentrations – Tanita Johanna Ballé (PTB)

Physics Talks

Solid State Experiment

Friday
16:30 - 18:00

FTU Aula
Campus North

- Highly-sensitive photodetachment spectroscopy in an MR-ToF device – Franziska Maier (ISOLDE/CERN & University Greifswald)
- Highly crystalline In_2S_3 thin films epitaxially grown on sapphire substrates: A potential candidate for intermediate band solar cells – Tanja Jawinski (University of Leipzig)
- Increasing system efficiency and functionality of microelectronics: multipurpose group IV alloys – Agnieszka Anna Corley-Wiciak (IHP, Frankfurt)
- Electrical active defects caused by threading dislocations in Ge-rich GeSi heterostructures integrated on Si(001) – Henriette Tetzner (IHP, Frankfurt)
- Substrate Influence on the Fano coupling of bright-dark modes in THz plasmonic n-doped Ge antennas – Elena Hardt (IHP, Frankfurt)
- Design of Multilayer Stacks for Use as a Selective Emitter in a Thermophotovoltaic System – Maria Masood (IHP, Frankfurt)

Guided Tours

Guided Tours at KIT Research Facilities

Friday
14:00 - 16:00

Campus North

KATRIN Experiment: Measuring the neutrino mass with the world's most sensitive scale

Start: 14:00, 14:30, 15:00, 15:30

Access restrictions: No active biomedical implants allowed

Meeting Point: east entrance of building 460 (spectrometer hall)

We invite you to visit the Karlsruhe Tritium Neutrino (KATRIN) Experiment located at KIT Campus North.

KATRIN is an international project for fundamental research. Its goal is to measure the neutrino mass by precisely analysing the beta-electron spectrum of tritium. Neutrinos are the most abundant particle species in the universe. They are described in the standard model of elementary particles as being massless. However, observations of solar and atmospheric neutrinos have led to the conclusion that neutrinos indeed carry a tiny, but non-zero mass. In order to determine this mass KATRIN uses a high-luminosity tritium source and a spectrometer with 10m in diameter. With this experimental setup KATRIN holds the world-best current limit on the neutrino mass of 0.8 eV at 90% confidence level and is continuing to take data for a target sensitivity of 0.2 eV.

KARA and FLUTE: the KIT particle accelerators

Start: 14:00, 15:00

Access restrictions: None

Meeting Point: north entrance of building 348 (synchrotron KARA hall)

Come visit the particle accelerators developed and operated by the Institute of Beam Physics and Technology (IBPT) at KIT.

The research infrastructure Karlsruhe Research Accelerator (KARA) provides a 2.5-GeV storage ring and light source for experiments with electron beams and intense synchrotron radiation for deep insights into matter, biological structures, and materials. The FLUTE facility (name abbreviation derived from its German name: Ferninfrarot Linac- und Test-Experiment) is a linear accelerator that will provide coherent radiation in ultra-short, very intense, light pulses spanning the terahertz and far-infrared spectral range and beyond.



The High Performance Computer HoreKa at Steinbuch Centre for Computing (SCC)

Start: 14:00, 14:30, 15:00, 15:30

Access restrictions: None

Meeting Point: south entrance of building 449 (SCC building)

SCC operates large-scale research equipment and large-scale research infrastructures at KIT Campus North and Campus South. This visit concerns the High Performance Computer HoreKa, which was among the 15 most powerful computers in Europe when it was commissioned in mid-2021. HoreKa can provide a computing power of approximately 17 PetaFLOPS. The system is available to scientists from all over Germany.



Profession

Physics and Profession 1

Fusing physics, entrepreneurship and family

Iris Schwenk (HQS Quantum Simulations GmbH)

In this talk, I would like to give you some insights into the founding history of HQS Quantum Simulations GmbH and my job as Co-Founder and COO. HQS, founded in 2017, aims to bridge the gap between research and industry in the field of quantum computing. We develop software for conventional computers and quantum computers to exploit the immense potential of quantum level simulations to accelerate the development of new materials in the chemical, pharmaceutical, and materials industry. I completed my PhD in Physics at Karlsruhe Institute of Technology in 2018. Shortly before HQS was founded, my first child was born and my PhD was not yet completed. In my talk, I will explain why I have chosen this path under these circumstances. As COO, I'm now responsible for efficient business operations and organizational development and for the development of the customer-facing software. My role allows me to work in an extremely interesting field with interesting people while at the same time helping to shape our working environment. My physics degree allows me to familiarize myself very quickly with new topics, both in the field of technology and in entrepreneurial topics. This allows for fast and focused decision making even in a very dynamic environment, which is essential to move our company forward.

Friday
9:00 - 10:30

Building 419, Room 104
Campus North

From b-tagging to the autonomous supply chain – a career outside of physics

Johanna Fleckner-Barber (Blue Yonder GmbH)

Johanna is currently working as Product Director at Blue Yonder, a software company providing supply chain and retail planning offerings. Johanna completed her physics degree at the University of Mainz and completed her PhD at CERN working on the ATLAS experiment. After finishing her degree, Johanna started working for Blue Yonder as a Data Scientist, Project Manager and now as Product Director. She is currently responsible for Blue Yonder's supplier ordering solution in retail, from understanding customer requirements, working with User Experience designers on new workflows and implementing them together with the development teams. In her career she works with experts around the globe, to understand complex process workflows and to abstract them into a product solution.

Towards fully autonomous robotics: a physicist's view

Shruti Patel (University of Bremen)

In order to interact safely with the physical world, an autonomous system needs to be able to sense, perceive, plan and act. Research and development of algorithms that enable this kind of intelligent decision-making in robots operating in unstructured, dynamic environments is a task that lies at the intersection of mathematics, physics, computer science and mechanical engineering. As a postdoctoral researcher and project lead in the field robotics team of the group "Optimization and Optimal Control" at the University of Bremen, my work involves close collaboration with industry partners to develop algorithms for autonomous robots and apply them to real prototypes. In this talk, I would like to provide insights into the challenges we face on our way to creating fully autonomous systems, the role that a sound understanding of physics and mathematics plays in being able to find solutions to them, and finally into my career path from theoretical physics to robotics. After completing my masters in physics at the Indian Institute of Technology, Madras, I came to DESY Hamburg for my PhD in particle physics phenomenology, following which I continued in particle physics as a postdoc at the Karlsruhe Institute of Technology. Wanting to transfer to the industry but not yet willing to fully leave research, I now work at the Center for Industrial Mathematics at University of Bremen, where I have been a postdoctoral researcher since 2020.

Workshop 1

Selbstmarketing für Wissenschaftlerinnen

Friday
9:00 - 10:30 & 11:00-12:30

SCC, Room 126
Campus North

This workshop is for pre-gistered participants only!

Dass Selbstmarketing immer wichtiger wird, um die eigene Forschung bekannter zu machen, ist den Meisten in der akademischen Welt längst klar. Viele stehen aber dennoch vor der Frage, wie genau man das nun am besten angeht und worauf es – insbesondere als Frau – zu achten gilt. Der Workshop bietet die Möglichkeit, sich mit diesem Thema in einer Peer Group stärker auseinanderzusetzen, und gibt Tools und Ressourcen an die Hand, um sich als Forscherin selbstbewusst und effektiv zu präsentieren.

Target groups: female PhD candidates, female postdocs

Trainer: Ines Köhler (KIT)

Workshop 2

Self-marketing: Putting your best self forward

Friday
14:00 - 16:00 & 16:30-18:00

Online (Zoom)
SCC, Room 126
Campus North

This workshop is for pre-gistered participants only!

This workshop will take place exclusively online via zoom! In-person participants who are registered for this online workshop can use room 126 in the SCC building for online participation. Please bring your own devices and headphones.

Self-marketing has become more and more important in these days and age, but there is very little guidance and resources on the best practices for academics. In addition, women in academia face challenges that their male-counterparts do not when it comes to marketing and visibility. This workshop aims to provide female academics with the tools and resources to enable them to market themselves effectively and with confidence.

Target groups: female PhD candidates, female postdocs

Trainer: Francesca Carlin



Keynote Gender Talks

How can early career researchers contribute to the fight for equity?

Jess Wade (Imperial College London)

Despite women leading the development of the Moderna, Astra Zeneca and Johnson & Johnson COVID-19 vaccines, the majority of adults cannot name a female scientist. That is not entirely surprising given the national curriculum for science does not include a single woman's name. Jess will talk about how who we talk about matters, and the importance of science communication and awareness of the universality of (historic and present) scientific contributions for global human development. She will also discuss her efforts to increase visibility of scientists from historically marginalised groups on Wikipedia, her research in materials science and nanotechnology, the power of social media for early career researchers and her new picture book 'Nano, the Spectacular Science of the Very (Very) Small'.

Friday
14:00 - 15:00

FTU Aula
Campus North

Gender within the culture of physics

Andrea Bossmann (TU Berlin)

Research in physics is supposed to be objective: physicists perform experiments and measurements, mathematical derivations, or numerical simulations. The methods as well as the research objects do not have a gender. At the same time we observe that still today the vast majority of physicists are (white) men. Why is it like this? And what implications does this have? This talk will give an overview of the current state of research of gender and diversity studies in physics. I will highlight what we can learn from gender studies about the social context of our research practice and the everyday workplace culture in physics. Furthermore, I will address insights from the comparison with the situation in other countries and which approaches and strategies may help improve the situation.

Friday
15:00 - 16:00

FTU Aula
Campus North



Gender Projects

Die Geschichte von AKC und DPT

Agnes Sandner (AKC)

Mit diesem Beitrag stellen wir Euch den Arbeitskreis Chancengleichheit (AKC) vor, eine fachübergreifende Vereinigung innerhalb der Deutschen Physikalischen Gesellschaft (DPG) mit über 690 Mitgliedern. Das Ziel des AKC ist die Verbesserung der Rahmenbedingungen und Strukturen für Frauen in der Physik zur Erreichung von Chancengleichheit in Ausbildung und Beruf. Hierzu gehört auch die jährlich stattfindende Physikerinnentagung. Die Tagung stellt eine Plattform zum Kennenlernen und Austausch dar, und sie erhöht so die Sichtbarkeit von Physikerinnen. Im Vortrag geben wir einen Überblick über die Geschichte des AKCs und der DPT von der Idee über die Gründung bis zum heutigen Zeitpunkt. Dabei zeigen wir zahlreiche Meilensteine auf, beginnend mit der Schaffung des AKCs und der DPT. Wir benennen die vielfältigen Aufgaben, die unsere Kommission und ihre Unterstützerinnen bearbeiten. Für die Gestaltung der Zukunft brauchen wir Euch, bitte teilt uns Eure Meinung, Wünsche und Ziele mit.

Friday
16:30 - 17:30

Building 419, Room 104
Campus North

Physik-Projekt-Tage – Gleichstellung in der Physik an Hand eines Workshops nur für Schülerinnen

Anna Benecke (UC Louvain)

Dass Gleichstellungsarbeit besonders in der Physik ein wichtiges Thema ist, zeigen nicht zuletzt die Einschreibezahlen von Studentinnen in den Physikstudiengängen. In Kiel liegt der Prozentsatz von Frauen bei etwa 15%. Um ein angemessenes Geschlechterverhältnis auf allen Karriereestufen zu erreichen genügt es daher nicht, erst an der Universität mit Gleichstellungsarbeit zu beginnen - es muss bereits in der Schule angesetzt werden. Mit den Physik-Projekt-Tagen (PPT) wurde ein viertägiger Workshop nur für Schülerinnen ins Leben gerufen. Die Teilnehmerinnen haben die Möglichkeit, zu Schuljahresbeginn vier Tage lang in einem Projekt ihrer Wahl zu experimentieren, ihr Interesse an Physik zu steigern und Netzwerke über Schulgrenzen hinweg aufzubauen. Die Projekte umspannen verschiedene Forschungsfelder der Physik und reichen von Teilchenphysik, über Laserphysik und Plasmaphysik bis hin zu Nanowissenschaften. Zur Qualitätssicherung und Weiterentwicklung dieser Veranstaltung werden die PPT von einer kritischen Evaluation begleitet. Das Konzept der PPT, Inhalte und ausgesuchte Ergebnisse der Evaluation werden vorgestellt. Seit 2015 ist das Projekt im Instrumentenkasten für Gleichstellungsarbeit der DFG.

Friday
17:30 - 18:00

Building 419, Room 104
Campus North



Social Program

Catch up, engage, explore

Friday
19:00 - 20:30

Meeting Point:
Bus Stop KIT Campus South

The social activities are always a key component of the DPT conference, in addition to the scientific program. From the welcome reception to the leisure Friday evening activities and then the conference dinner, you will have the chance not only to catch up and engage with your peers outside of the scientific sessions, but also to get a feeling of the city of Karlsruhe.

Bar Hopping Tour



Get a feeling of the Karlsruhe nightlife by exploring several different locations with stops at iconic bars.

Important information: There will be plenty of possibilities to get food on the way, so there is no need to take care of that beforehand.

Contact person: Miriam Novotny (ugjoa@student.kit.edu)

Guided „Light“ City Tour

Find out about the beginnings of lighting, explore the origin of the Christmas pyramid and learn how the Karlsruhe Theater burned down completely in 1847. Four tours will be given (three in German and one in English), each one with a separate guide.

Important information: Please bring some warm clothes, as late November evenings can be quite chilly.

Contact person: Max Burkardt (max.burkardt@student.kit.edu)



ET



Tour to the Vogelbräu Brewery

Let the brewers take you to a tasting tour right in the heart of the Vogelbräu art of brewing, where good local beer has been brewed using traditional methods since 1985. Apart from the beer tasting, you will get a certificate and original mug at the end of the tour.



Important information: Since Vogelbräu is a Biergarten/restaurant, you have the opportunity to eat dinner after the tour (not included in the fee).

Contact person: Max Burkardt (max.burkardt@student.kit.edu)

Oriental Dance Workshop

Get the oriental feeling while learning a few basic movements of Raqs Sharqi ("dance of the Orient"). The course is intended for beginners, so no experience is necessary. Make sure, though, that you bring comfortable clothing (changing rooms are available); no sport shoes are required.



Important information: Please be on time at the meeting point, since we set off at 18:45! However, if you do not manage to be at the meeting point on time, you can head towards the hall by yourself (see below).

Location: large martial arts hall in the basement of building 40.44 KIT Campus South, KIT Hochschulsport (Engler-Bunte-Ring 13). The hall can be found by turning right after the entrance inside the building, then down the stairs, left (through the door), straight ahead until you reach the end of the floor and then left.

Contact person: Elina Merkel (elina.merkel@student.kit.edu, +4915201923734)

Mental health in academia: together we can be the change!

Do you feel like mental health is still a taboo and you cannot openly talk about mental health while being at academia? This situation is not sustainable and we can only make a difference together. During this workshop, we want to imagine a utopian academic work environment and develop together concrete ideas that will move us closer towards it.

Important information: Be aware that this workshop is organized by peers for peers, so there will be no professional support provided.

Location: Room 10-1 building 30.23 (10th floor), KIT Campus South (Wolfgang-Gaede-Str. 1)

Contact person: Anja Beck (Anja.Beck@warwick.ac.uk)





The Code of Conduct **How to treat each other**

Our conference is dedicated to providing a harassment-free conference experience for everyone, regardless of gender, gender identity and expression, age, sexual orientation, disability, physical appearance, body size, race, ethnicity, religion (or lack thereof), or technology choices. We do not tolerate harassment of conference participants in any form. Sexual language and imagery are not appropriate for any conference venue, including talks, workshops, social activities related to the conference, Twitter, and other online media. Participants asked to stop any harassing behavior are expected to comply immediately. Conference participants violating these rules may be sanctioned or expelled from the conference without a refund at the discretion of the conference organizers.

If you experience any kind of harassment or discrimination or feel uncomfortable for any reason, please contact our CARE-Team. They will provide help and contact to the conference organizers, if necessary, and in agreement with you.



Program

Thursday 24/11 (Campus South)

7:00

9:00

11:00

13:00

15:00

Registration and Coffee

Festsaal

17:00

Welcome

Festsaal

Opening Lecture: Stephanie Hansmann-Menzemer (University of Heidelberg)

Festsaal

19:00

Reception and Group Photo (19:45)

Festsaal

21:00

Program

Friday 25/11 (Campus North)

7:00	Commuting by bus: Campus South to Campus North				
9:00	Physics Talks: Geophysics FTU Aula	Physics Talks: Solid State Theory 401	Physics and profession 1 419	Workshop 1: Selbstmarketing für Wissenschaftlerinnen SCC	
	Coffee Break				
11:00	Keynote Physics Talk: Geophysics FTU Aula	Keynote Physics Talk: Solid State Exp 401	Workshop 1: Selbstmarketing für Wissenschaftlerinnen SCC		
	Keynote Physics Talk: Meteorology/Atmosph. Physics	Keynote Physics Talk: Solid State Theory 401			
13:00	Lunch Break (Canteen „Casino“ / Building 348 / SCC)				
15:00	Tour 1: KATRIN	Guided Tour 2: KARA & FLUTE	Tour 3: HoreKa	Gender KN Talk: Fight for equity FTU Aula	Workshop 2: Self-marketing: Putting your best self forward SCC
	Tour 1: KATRIN		Tour 3: HoreKa		
	Tour 1: KATRIN	Guided Tour 2: KARA & FLUTE	Tour 3: HoreKa	Gender KN Talk: Gender in physics FTU Aula	
	Tour 1: KATRIN		Tour 3: HoreKa		
	Coffee Break				
17:00	Physics Talks: Meteorology 401	Physics Talks: Solid State Experiment FTU Aula	Workshop 2: Self-marketing: Putting your best self forward SCC	Gender Projects 419	
	Commuting by bus: Campus North to Campus South				
19:00	Social Program Meeting at Bus Stop				
21:00					

Program

Saturday 26/11 (Campus South)

7:00

9:00	Physics Talks: Astroparticle Physics Gaede HS	Physics Talks: Quantum Effects, Materials Physics Otto-Lehmann-HS	Physics and Profession 2 KI. HS A	Workshop 3: Weg in die Professur 229.3	Workshop 4: Becoming appointable: path to a professorship KI. HS B
	Coffee Break				Coffee Break
11:00	Physics Talks: Astro & Exp. Particle Physics Gaede HS	Physics Talks: Biophysics, Medical Physics Otto-Leh.-HS	Physics and Profession 3 KI. HS A	Workshop 3: Weg in die Professur 229.3	Workshop 4: Becoming appointable: path to prof.ship KI. HS B
					Schülerinnen programm: Programmieren
					Poolraum
13:00	Lunch Break			AKC Meeting Otto-Leh.-HS	
	Keynote Physics Talk: Future Accelerators Gaede HS	Keynote Physics Talk: Biophysics O-L-HS	Schülerinnenprogramm: Geophysik Vortrag KI. HS A		
15:00	Keynote Physics Talk: Nonlinear Optics	Keynote Physics Talk: Theory (Complex Fluids and Soft Matter)			
	Coffee Break				Coffee Break
17:00	Poster Session Gaede Foyer	Market Place Gaede Foyer	Schülerinnenprogramm: Beschleunigerphysik Vortrag KI. HS A		
19:00	Panel Discussion: Female physicists in leadership positions - pathways and challenges Gaede HS				
21:00	Conference Dinner (until 23:00) Südwerk Karlsruhe City				

Program

Sunday 27/11 (Campus South)

7:00

9:00

Physics Talks: Particle Physics Experiment Gaede HS	Physics Talks: Micro-/ Nanophysics 1 Otto-Lehmann-HS	Physics and Profession 4 Kl. HS A	Workshop 5: Sagen Sie mir, was ich verdienen soll – mein Wert fürs Unternehmen 229.3	Workshop 6: Salary negotiations training Kl. HS B
--------------------------------------------------------------	---------------------------------------------------------------	-----------------------------------------	-----------------------------------------------------------------------------------------------------	------------------------------------------------------------

Coffee Break

11:00

Physics Talks: Particle Physics Theory Gaede HS	Physics Talks: Micro-/ Nanophysics 2 Otto-Lehmann-HS	Physics and Profession 5 Kl. HS A	Workshop 5: Sagen Sie mir, was ich verdienen soll – mein Wert fürs Unternehmen 229.3	Workshop 6: Salary negotiations training Kl. HS B
----------------------------------------------------------	---------------------------------------------------------------	-----------------------------------------	-----------------------------------------------------------------------------------------------------	------------------------------------------------------------

13:00

Lunch Break

Keynote Physics Talk: Particle Physics Theory Gaede HS	Keynote Physics Talk: Microstructure of Materials and Systems Otto-Leh.-HS
Keynote Physics Talk: Particle Physics Experiment Gaede HS	Keynote Physics Talk: Dark Matter Otto-Lehmann-HS

15:00

Farewell

Gaede HS

Coffee

Gaede Foyer

17:00

19:00

21:00



Physik für Schülerinnen

Ein Tag an der Uni - Sei dabei und schnupper Uni-Luft!

Sa 26. November 2022



Eine Uni von innen sehen

Ohne Anmeldung

16:00

Physik Vortrag

Beschleunigerphysik



Studienberatung



Workshop

**Programmieren für
Schülerinnen**

Sprache: Python



Was ist Geophysik?

Geophysik Vortrag

14:00

Ohne Anmeldung

Anmeldeschluss: 19.11.

Kein Vorwissen
vorausgesetzt

Kostenlose Crêpes!

Für Schülerinnen
ab Jahrgangsstufe 9

Infos und Workshopanmeldung:

s.kit.edu/dpt-anmeldung



Keynote Physics Talks

AWAKE: Pushing to new particle energy frontiers with plasma wakefield

Edda Gschwendtner (CERN)

The construction of ever larger and costlier accelerator facilities has its limits, and new technologies will be needed to push the energy frontier. Plasma wakefield acceleration is a rapidly developing and promising field which provides acceleration gradients a factor 10 to 1000 larger than in conventional radio-frequency metallic cavities used in current accelerators.

This presentation introduces the plasma wakefield acceleration technology, shows the technological challenges, gives an overview of the state of the art and shows promising results of the advanced proton driven plasma wakefield experiment, AWAKE, at CERN.

Category: Particle / Astroparticle / Cosmology (Experiment)

Saturday
14:00 - 14:45

Flachbau, Gaede Hörsaal
Campus South

Graphene by light – how nonlinear optics creates artificial topological matter

Cornelia Denz (Physikalisch-Technische Bundesanstalt (PTB))

Graphene with its hexagonal band structure of the energy spectrum has been celebrated in the past years as an ultrathin wonder material due to its intriguing features. Thus, it is a long-standing dream of solid-state physics to vary this lattice structure beyond graphene in order to extend the features of two-dimensional (2d) materials, for example to topological insulation.

While condensed matter systems are difficult to adapt, optically-created artificial dielectric photonic matter represent an ideal testbed for these 2d materials. This has led to the field of topological photonics, an emerging field in which geometrical and topological concepts are implemented to mold the flow of light. In our contribution, we introduce into this field of nonlinear optics, explaining how to fabricate those 2d photonic materials and demonstrate new 2d photonic materials as twisted bilayer graphene or photonic borophene, the optical equivalent of the new rising star of solid-state physics. We also showcase fascinating topological effects including nonlinear light localization in higher-order topologies.

Sa
Saturday
14:45 - 15:30

Flachbau, Gaede Hörsaal
Campus South

Category: Solid State (Experiment)

Deciphering a smart material – a new method to measure actin cortex mechanics and mechanosensitivity

Elisabeth Fischer-Friedrich (Excellence Cluster Physics of Life, TU Dresden)

Saturday
14:00 - 14:45

Flachbau, Otto-Lehmann-Hörsaal
Campus South

The actin cortex is a thin polymer network beneath the plasma membrane in animal cells. It acts as a mechanical shield of the cell and as a major regulator of cell shape and cell migration. The actin cortex is a complex material with time-dependent viscoelastic mechanical properties. It is further subject to a self-generated active contractile stress and to constituent turnover. I will discuss our measurement results on frequency-dependent cortical viscoelasticity measured by atomic force microscopy. In addition, I will discuss how mechanosensitivity of molecular bonds can affect molecular composition of the cortex and how this mechanosensitivity can be quantified in live cells.

Category: Biophysics

Disordered Solids

Annette Zippelius (Georg-August Universität Göttingen)

We discuss a phase of matter which is characterized by random localization of the atoms or molecules and a finite restoring force for static shear deformations. The following questions will be addressed: What is an appropriate order parameter for the amorphous solid state? How can we characterize its random structure? How do long range elastic correlations develop at the glass transition? These questions will be discussed by means of a statistical mechanical theory of disordered system as well as generalised hydrodynamics.

Saturday
14:45 - 15:30

Category: Solid State (Theory)

Flachbau, Otto-Lehmann-Hörsaal
Campus South



Physics Talks

Physics Talks

Astroparticle Physics

- Development of a Second-Level Trigger for the Autonomous Detection of Air-Shower Radio Emission – Jelena Petereit (KIT)
- Improving the external trigger of AERA for extensive air showers at the Pierre Auger Observatory – Rukije Uzeiroska (Bergische Universität Wuppertal)
- Radio neutrino detection with RNO-G – Karen Terveer (Friedrich-Alexander-Universität Erlangen-Nürnberg)
- MACS J1423.8+2404: gravitational lensing by a massive, relaxed cluster of galaxies at $z = 0.54$ – Patel Nancy (Durham University)
- Observing Dark Matter in Galaxy Clusters with Strong Lensing and MUSE Spectroscopy – Catherine Cerny (Durham University)
- Strong gravitational lensing: Nature's cosmic telescope to reveal dark matter and the faintest galaxies in the universe – Guillaume Mahler (Durham University)

Saturday
9:00 - 10:30

Flachbau, Gaede Hörsaal
Campus South

Physics Talks

Quantum Effects, Materials Physics

- Quantum effects in black hole interiors – Christiane Katharina Maria Klein (University Leipzig)
- Correlation measurements of the ground state of light – Laura Sophie Gabriel (ETH Zurich)
- Non-Adiabatic Holonomic Quantum Computing in Integrated Quantum Optics – Vera Neef (Universität Rostock)
- Numerical simulations and model development for metallurgical processes – Christine Gruber (K1-MET GmbH)
- Direct spectroscopic identification of reactive metal-oxygen species – Mayara da Silva Santos (Helmholtz-Zentrum Berlin für Materialien und Energie)
- Disproportionation in gas-phase di-manganese oxide cluster revealed by X-ray absorption spectroscopy – Olesya Ablyasova (Helmholtz-Zentrum Berlin für Materialien und Energie)

Saturday
9:00 - 10:30

Flachbau, Otto-Lehmann-Hörsaal
Campus South

Physics Talks

Astroparticle and Experimental Particle Physics

Saturday
11:00-12:30

Flachbau, Gaede Hörsaal
Campus South

- Search for the rare decay $\Omega_b^- \rightarrow \Omega^- \mu^- \mu^+$ at the LHCb experiment – Janina Nicolini (TU Dortmund University/ Université Paris-Saclay)
- Top quark measurements at the Large Hadron Collider – Harriet Watson (University of Glasgow)
- Multiboson measurements at CMS – Ankita Mehta (University of Hamburg)
- Search for Dark Matter with the XENONnT experiment – Johanna Jakob (Westfälische Wilhelms-Universität Münster)
- Metadata curation in astroparticle physics on KCDC usecase – Victoria Tokareva (KIT)

Physics Talks

Biophysics, Medical Physics

Saturday
11:00-12:30

Flachbau, Otto-Lehmann-Hörsaal
Campus South

- Dose-efficient X-ray phase contrast imaging by Bragg magnifier optics – Rebecca Spiecker (KIT)
- BK-channel as a fast and precise Ca^{2+} sensor: application to PMCA pump strength measurements – Barbara Schmidt (Saarland University)
- How diamond sensors can help to understand the magnetic sense of animals – Franziska Curdt (Universität Oldenburg)
- Multi-method characterization of bone to find correlations between biological and material properties – Victoria Schemenz (Centrum für Zahn-, Mund- und Kieferheilkunde Charité - Universitätsmedizin Berlin)

physikerinnentagung.de
More Information
& full abstracts



Poster Session

Poster Session

Saturday
16:00 - 18:00

Flachbau, Gaede Foyer
Campus South

The poster session will take place on Saturday between 16:00 and 18:00. The poster walls are available from Saturday morning. Please, make sure that you put up your poster before the first coffee break starting at 10:30 on Saturday morning on the assigned position. You will find your corresponding poster number on one of the poster walls.

For fruitful discussions, we recommend that the authors are available at their poster for the complete poster session.

Posters can be picked up on Sunday morning during the first coffee break in the conference office, giving people time to discuss, even after the poster session has finished. In case you have to leave the conference on Saturday already, please take down your poster on Saturday evening by yourself.

Poster award: The best posters with the best presentation will be chosen by a jury. They will be honored on Sunday during the Farewell Session. Special thanks to the sponsor of the poster award, the Cluster of Excellence 3D Matter Made to Order (3DMM2O) of KIT and Heidelberg University.

physikerinnentagung.de
More Information
& full abstracts



Sa

Particle Physics (Theory)

- Semi-visible Dark Matter Signatures – Noline Hemme (KIT)
- Global fits for Dark Matter searches with GAMBIT – Sri Sankari alias Sowmiya Balan (RWTH Aachen University)
- Matter-Antimatter Asymmetry and Composite Higgs Models – Aika Tada (MPI Heidelberg)

Particle Physics (Experiment)

- Towards a pulsed beam of antihydrogen for tests of the Weak Equivalence Principle for antimatter. – Saiva Huck (CERN, Universität Hamburg)
- A New Beam Halo Veto Detector for the MAGIX Experiment – Judith Schlaadt

Astroparticle Physics / Cosmology (Experiment)

- A Look at General Neutrino Interactions with KATRIN Data – Caroline Fengler (KIT)
- Sensitivity studies for eV scale sterile neutrino searches with KATRIN – Shailaja Mohanty (KIT)
- The QSNET-Network of high-precision clocks and the quest for light dark matter.. – Saskia Kreienbaum (Humboldt-Universität zu Berlin)
- Optimizing TES detection systems for extremely low background dark matter searches – Christina Schwemmbauer (DESY)
- Development of an active transverse energy filter (aTEF) for background reduction at the KATRIN experiment – Sonja Schneidewind (University of Münster)

Nuclear Physics

- The influence of displacement damage on helium interaction with and retention in tungsten. – Annemarie Kärcher (Technische Universität München)

Poster Session

Solid State (Experiment)

- Momentum-resolved hard X-ray photoemission – Olena Tkach (Johannes Gutenberg University, Mainz)
- Droplets evaporation on chemically patterned surfaces – Zhang Hongmin (KIT)
- Current-driven writing process in antiferromagnetic Mn₂Au for memory applications – Yaryna Lytvynenko (Johannes Gutenberg-University Mainz)
- Time-resolved second-harmonic imaging microscopy: ultrafast processes in ultra-thin materials. – Marleen Axt (Philipps-Universität Marburg)
- Application/Technology-inspired design of quantum dot models for electron dynamics simulations – Sara Marando
- Measuring correlated phases in encapsulated bilayer graphene via graphite contacts – Isabell Weimer (Georg-August-Universität Göttingen)
- High-Frequency ESR Studies on the Frustrated quasi-1D Spin-1/2 Chain PbCuSeO₄(OH)₂ – Rahel Ohlendorf (Kirchhoff Institute for Physics, Heidelberg)
- Temperature dependence of Raman scattering of Ge and GeSn layers – Diana Ryzhak (IHP – Leibniz-Institut für innovative Mikroelektronik)
- Viscous Fingering Modelling via Phase Field Approach – Shan Lyu (KIT)
- Understanding jets of uniform helium droplets along their path of propagation – Marie Louise Schubert (ETH Zurich)
- Towards experimental detection of crystallization in individualized polymer chains – Wing Kit Or (Universität Leipzig)
- Phase-transition in MoTe₂ tracked by time-of-flight momentum microscopy – Olena Fedchenko (JGU, Institut für Physik)

Solid State (Theory)

- 2D spectroscopy for the Detection of Electron-Phonon Coupling in Perovskites and Cuprates – Vishal Kumar Sharma (Goethe University, Frankfurt am Main)
- Lattice-driven femtosecond magnon dynamics in α -MnTe investigated with linear spin wave theory – Kira Deltenre (TU Dortmund University)

Quantum Effects / Computing

- Towards switchable photon-photon interactions – Karen Wadenpfohl (Universität Heidelberg and Durham University)
- Controlling atomic interactions and collective effects in thermal vapor cells – Annika Belz (Universität Stuttgart)
- Using Four-Wave Mixing in Thermal Vapours as a single photon source – Clare Higgins (Durham University)
- Rydberg atom interactions at the interface of an optical nanofiber – Aswathy Raj (Okinawa Institute of Science and Technology (OIST), Japan)
- Narrow-linewidth Laser Systems for the $1S_0$ - $3P_2$ and $1S_0$ - $3P_0$ Clock Transitions in Strontium – Alexandra Beikert
- Development of Microfabrication processes for a scalable Multilayer Surface Electrode Ion Trap Quantum Computer – Nila Krishnakumar
- Traveling wave parametric amplifiers for microwave quantum optics – Sina Böhling (KIT)
- A Graphical Formalism for Entanglement Purification – Lina Vandr  (Uni Siegen)



Poster Session

Materials Physics

- Designing an experiment for four-wave mixing with optical nanofiber evanescent dipole-trapped atoms. – Zohreh Shahrabifarahani (Okinawa Institute of Science and Technology (OIST), Japan)
- Hot Carrier Injection and Bias Temperature Instability in SiC Transistors – Sophie Winkler
- Direct spectroscopic identification of reactive metal-oxygen species – Mayara da Silva Santos (Helmholtz-Zentrum Berlin für Materialien und Energie)
- Characterization of the parameters for gas phase CaMn_4O_5 cluster. Sample preparation by mass spectrometry – Aryna A. Hreben (Helmholtz-Zentrum Berlin für Materialien und Energie)

Micro-/ Nanophysics

- Flat-field correction for dynamic processes – Thea Engler (DESY)
- Numerical simulation of topologically optimized open-pore metal foams using a phase-field approach – Jana Holland-Cunz (KIT)
- Towards dynamic measurements of individualized macromolecules – Alaa Hassan (Universität Leipzig)
- Development of manufacturing processes for coordinate-based 3D μ -standarts – Celina Hellmich (Physikalisch Technische Bundesanstalt Germany)



Meteorology / Atmospheric Physics

- Simulating Arctic Clouds using the Numerical Weather Prediction Model ICON – Gabriella Wallentin (KIT)
- Cloud response to volcanic eruptions – Melina Sebisch (KIT)

Biophysics

- Three-dimensional optical tomography of biomedical tissues. – Jasmin Schürstedt (Bielefeld University)
- Development of a highly efficient Bessel beam light sheet microscope – Luis van Merwyk (Bielefeld University)
- Development of a tomography system for 3D imaging in the short-wave infrared (SWIR) spectral region – Sylvia Steinecker (Bielefeld University)
- Steady-state operation of a cell-free genetic band-detection circuit – Anna Jäkel (TUM)

AKC Gender

- PHYSIKERINNEN: Zahlen und Fakten. – Dagmar Paarmann (AKC)

Physics and Profession 2

Saturday
9:00 - 10:30

Flachbau, Kleiner Hörsaal A
Campus South

Communicating science

Barbara Warmbein (Freelance, formerly DESY)

Love it or hate it: talking about your science has become an integral part of every scientist's life. But also non-scientists can do their part to get crucial messages across to media, funding agencies or the mysterious general public by supporting scientists, working out the messages, testing the strategy and generally asking the right questions and translating complicated stuff into everyday language. From a budding career in journalism the speaker found her way to the press offices of international labs and discovered the fascinating world of particle physics. Now a freelance science communicator, she will talk about her way into the business as well as present other paths into the world of science communication. She also has a few tips for those who want to try their hand at doing some communicating themselves.

My career as a particle physicist (so far)

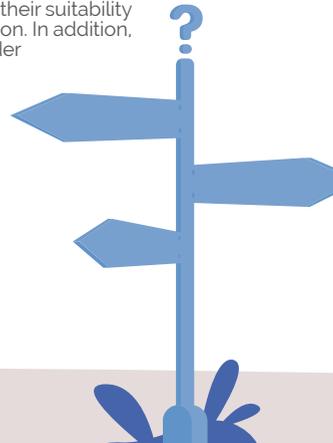
Beate Heinemann (DESY and University of Freiburg)

I will summarize my career starting from school where I enjoyed math, then studying physics at a German university and then doing research at several major laboratories and universities world-wide. I spend about 16 years in the UK and the USA before I came back to Germany. Earlier this year, I became the first ever female member of the directorial board of DESY, responsible for the area of particle physics. I will try to identify key turning points or events that shaped my career.

Aus der Wissenschaft zum Wissenschaftsverlag (From science to scientific publishing)

Stefanie Reichert (Nature Physics, Springer Natur)

After my undergraduate studies at Humboldt University Berlin, I pursued a PhD in experimental elementary particle physics at the University of Manchester, which was followed by a postdoc at the Technical University in Dortmund. I decided to leave academia to join Springer Nature, a scientific publisher, in 2018. Since then, I have been an editor at Nature Physics, an interdisciplinary physics journal, where I am responsible for the areas of particle, nuclear, plasma and astrophysics as well as cosmology and metrology. As an editor, I select research papers according to their suitability for the journal, organize peer review and ideally see them through to publication. In addition, I write and edit texts to make scientific results more accessible to a broader physics audience. As I need to stay informed on recent developments in the areas I handle, I attend conferences, visit laboratories and connect with researchers. In this talk, I will give an introduction into the world of scientific journals and into the various tasks of a professional editor.



Physics and Profession 3

Saturday
11:00 - 13:00

Flachbau, Kleiner Hörsaal A
Campus South

Microchips for Megatrends – Work where tomorrow is mad

Miriam Carlberg (Carl Zeiss AG)

In this talk, I would like to outline my daily tasks at my job at ZEISS Semiconductor Manufacturing Technology and my academic path to arriving here. I completed degrees in physics in several countries: Bachelor's degree from the University of Luxembourg, Master's degree from Joseph Fourier University in Grenoble and a PhD from the Aix-Marseille University. Since finishing my PhD four years ago, I have been working at ZEISS Semiconductor Manufacturing Technology as a research assistant. My day-to-day work cannot be described in a single sentence as it varies and is challenging. It extends from preparing two 40T vacuum chambers for our high-end processes, through to testing our processes on new materials to project planning for the next fiscal year. Slowly but surely, my colleagues and I are contributing every day to creating even small and faster semiconductors – until we reach the limits of Moore's law?

Introduction to Infineon and opportunities for female physicists

Hannah Schamoni (Infineon Technologies AG)

In this talk, I would like to give you insights into my job at Infineon Technologies and into my career and life path. I completed my PhD with a focus on semiconductor physics in 2019 at the Technical University of Munich. After finishing my degree, I participated in the MBA program of the Collège des Ingénieurs and I am currently working as a project manager for research and development excellence at Infineon since December 2020.

My day-to-day job involves creating and improving methods and processes that help to make R&D projects run more efficiently, for example by using data to create additional insights. For this, I work together with colleagues from many different departments, in different functions and across organizational levels. My physics degree allows me to do my job because it enables a fundamental understanding of the technologies and products Infineon is offering, of how to create and handle data, and it has taught me how to analyze and solve complex questions in a systematic way.

Investigation of structural and dynamical properties of thermoresponsive polymers

Benedetta Petra Rosi (Forschungszentrum Jülich)

With my talk, I would like to present my work at the Forschungszentrum Jülich and some information about my career path. I have done my Physics studies in Italy, at the University of Perugia (where I did my BSc and PhD) and of Rome "La Sapienza" (where I did my MSc). During these years, I've been focusing on structural and dynamical properties of thermoresponsive polymers. In February 2022 I have started a postdoc at the Jülich Centre for Neutron Scattering (JCNS) at the FZJ, where I have the possibility to deepen my knowledge of polymer-based materials, from sample synthesis to data treatment and analysis.

Sa

Profession

Analytical. Quantitative. Tech – from physics to d-fine

Constanze Jahn (d-fine GmbH)

In this talk, I would like to tell you about my career at d-fine GmbH. After finishing my PhD in Physics at the Erlangen Centre for Astroparticle Physics at the University of Erlangen, I started working at d-fine as a consultant. I worked on many different projects with different team sizes (1-40) and different lengths (2 weeks to several years). Now, I am a manager and my day-to-day job involves leading projects and leading people. At d-fine I have the opportunity to work with extraordinary people, who have excellent quantitative, analytical and technical skills and always support each other. My physics degree enables me to solve complex problems, which is something I still need to do on a daily basis.

Exploring and shaping future technology at Bosch Research as a physicist

Elisabeth Schwarz (Bosch Research, Robert Bosch GmbH)

Janine Riedrich-Moeller (Bosch Research, Robert Bosch GmbH)

In this talk, Elisabeth and Janine, two physicists from Bosch Research would like to share their different career paths from academia to industry as well as their passion about cutting-edge research in future fields like quantum sensing, machine learning or fuel cell systems. Janine Riedrich-Moeller received her franco-german Master degree in physics from the Saarland University, Germany and the Université de Henri-Poincaré Nancy, France. After completing her PhD studies in the quantum optics group at the Saarland University, she joined the corporate research division of the Robert Bosch GmbH in Renningen, Germany, in 2015. In the domain of microsystems and quantum technology, she concentrates on the realization of quantum sensors for automotive and consumer applications. Elisabeth Schwarz completed her physics degree (M.Sc.) at Technische Universität Dresden in 2019 with a Master thesis in the field of organic electronics. After this, she joined Bosch Research in Renningen as a doctoral student. In her PhD studies in mechanical engineering with the TU Ilmenau production technology group, she combines machine learning and physical simulations for improved quality prediction in welding processes. From October 2022 on, Elisabeth will work as a research engineer in the cyber-physical systems department of the Bosch Solid Oxide Fuel Cell (SOFC) division.

Arbeitskreis Chancengleichheit Informationsveranstaltung und Mitgliederversammlung

Agnes Sandner (AKC), Dagmar Paarmann (AKC-Kommission)

Saturday
12:45 - 13:45

Flachbau, Otto-Lehmann-Hörsaal
Campus South

Der Arbeitskreis Chancengleichheit (AKC) der DPG hält im Rahmen der DPT eine Informationsveranstaltung und seine jährliche Mitgliederversammlung ab. Alle Mitglieder sowie auch weitere Interessierte sind herzlich zur Teilnahme eingeladen!

Die AKC-Kommission berichtet über ihre Arbeit des vergangenen Jahres und gibt eine Vorschau auf geplante Projekte und Veranstaltungen. Alle Anwesenden sind aufgerufen, sich aktiv mit neuen Ideen und Vorschlägen einzubringen. Eure Mitarbeit an den einzelnen Projekten ist jederzeit willkommen.

Im Rahmen der Mitgliederversammlung wird zudem nach den Regularien des AKC die Wahl neuer Kommissionsmitglieder stattfinden.

Wir freuen uns auf Euch und begrüßen Euch mit einem Mittags-Snack.

Workshop 3

Weg in die Professur

This workshop is for pre-gistered participants only!

Das Berufsziel "Professur" kann auf unterschiedlichen Wegen erreicht werden. Im Workshop sollen typische Karrierewege zur Voll-Professur (W2/W3) beleuchtet werden, die über eine Habilitation, habilitationsäquivalente Leistungen, Forschungsgruppenleitung oder eine Juniorprofessur beschritten werden können. Es sollen im Workshop u.a. diese Fragen beantwortet werden: Wie sehen die Einstellungsvoraussetzungen für eine Professur aus, welche Leistungen in Forschung und Lehre werden erwartet und welche Kenntnisse und Fähigkeiten sollten die Professurbewerberinnen innehaben? Wie erreicht man eine hohe Sichtbarkeit in der wissenschaftlichen Szene und wie sieht es gerade in der Qualifizierungsphase und als junge Professorin - mit der Vereinbarkeit von Beruf und Familie aus?"

Target groups: female PhD candidates, female postdocs

Trainer: Ulrike Preißler

Saturday
9:00 - 10:30 & 11:00-12:30

Flachbau, Room 229.3
Campus South

Workshop 4

Becoming appointable: the path to a professorship

This workshop is for pre-gistered participants only!

This workshop will take place exclusively online via zoom!
In-person participants who are registered for this online workshop can use Kleiner Hörsaal B for online participation. Please bring your own devices and headphones.

At the end of their PhD studies or during their postdoc years, many scientists are faced with the vital question of which way to go in the future: What are my professional goals and career aspirations? Do I see my future path in academia? Do I have the expertise and competencies required for a professorship in my field? Finding individual answers to these questions can be regarded as a crucial prerequisite for happiness and satisfaction with one's professional development. The online workshop has two objectives: on the one hand, participants receive differentiated information about possible career paths towards a professorship with their conditions and requirements. On the other hand, participants will become acquainted with key elements and methods of career planning. Following the concept of triadic career counselling professional achievements as well as more personal aspects like individual preferences, motivational factors and the situation in one's special field will be taken into account.

Target groups: female PhD candidates, female postdocs

Trainer: Margarete Hubrath

Friday
9:00 - 10:30 & 11:00-12:30

Online (Zoom)
Flachbau, Kleiner Hörsaal B
Campus South



Market Place

Market Place

KIT's physics research associations, KIT as an employer, and various companies and public services will present themselves at the Market Place.

Saturday
16:00 - 18:00

Flachbau, Gaede Foyer
Campus South

Industry and Public Service

- AKC Arbeitskreis Chancengleichheit der DPG
- Bundesamt für die Sicherheit der nuklearen Entsorgung
- d-fine GmbH
- HighFinesse GmbH
- Leica Microsystems GmbH
- Pfeiffer Vacuum GmbH
- Forschungszentrum Jülich GmbH
- Robert Bosch GmbH
- Trumpf SE+ Co. KG
- Carl Zeiss AG

KIT

- The employer KIT
- CRC TRR 257 „Particle Physics Phenomenology after the Higgs Discovery“ (Aachen-Heidelberg-Karlsruhe-Siegen)
- CRC TRR 288 „Elastic Tuning and Response of Electronic Quantum Phases of Matter“ (Frankfurt-Karlsruhe-Mainz)
- CRC 1441 „Tracking the active site in heterogeneous catalysis for emission control“
- Excellence Cluster „3D Matter Made to Order“ (3DMM2O)
- Helmholtz Energy
- KCETA - KIT Center for Elementary Particle and Astroparticle Physics
- KSETA - Karlsruhe School of Elementary Particle and Astroparticle Physics: Science and Technology
- Gender Equity 2



Panel Discussion

Female Physicists in Leadership Positions – Pathways and Challenges

Saturday
18:00 - 19:30

Flachbau, Gaede Hörsaal
Campus South

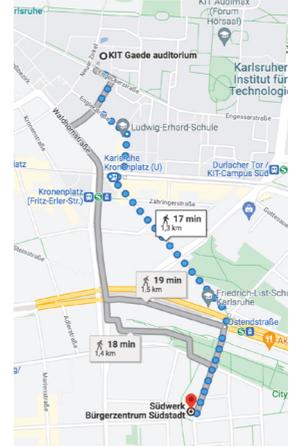
In this panel discussion, high-profile female physicists will give insights into their pathways to leadership positions in science and industry. They will describe what helped them to attain their current position and will discuss opportunities and challenges for female physicists. Moreover, they will share some of their personal experience and how they manage to combine a leadership position with private life.

Panelists are Cornelia Denz (PTB), Beate Heinemann (DESY), Johanna Kowol-Santen (DFG), Daniela Lange (SAP), and Christine Meyer (Bosch). The panel discussion will be moderated by Alexandra Hund (KIT).

How to get from Gaede Auditorium to the Conference Dinner

The shortest route from the KIT Gaede auditorium to Südwerk Bürgerzentrum Südstadt (Henriette-Obermüller-Straße 10, 76137 Karlsruhe):

Cross the Engesserstraße, go along the Lehmannstraße and then turn left onto the Englerstraße. Next turn right to stay on Englerstraße and cross the Kaiserstraße. Then turn right and go ca. 40m until you reach the 'Habibi' kiosk. Next turn left onto Waldhornstraße and go straight ahead ca. 550m until you reach the Ostendstraße (along the way you will cross the Kapellenstraße and see Evangelical Lutheran church St. Simeon on your left-hand side). Then turn right, cross the Ludwig-Erhard-Allee and go straight ahead ca. 300m until you reach Südwerk. It is a big two-storey brick building and will be on your right-hand side.





Saturday
20:00 - 23:00

Südwerk Bürgerzentrum
Henriette-Obermüller-Str. 10

The Conference Dinner

The Conference Dinner will be held on Saturday from 20:00 until 23:00 at Südwerk Bürgerzentrum Südstadt (Henriette-Obermüller-Straße 10, 76137 Karlsruhe). It takes about 15-20 minutes to walk there. It will be accompanied by performances of the physicists' chorus and physicists' theater of KIT and of the purple clouds dance group from Karlsruhe.

Our special thanks go to the sponsors of the conference dinner, Robert Bosch GmbH!

Purple Clouds Dance Group

The dancing group Purple Clouds was founded in March 2013 by Anja Madlener, who was an oriental dance instructor at KIT at that time. She and the most enthusiastic participants of her course created the group to train and perform together. Since then, Purple Clouds have grown and have been becoming more and more professional. Susanne Schönbrunn, a former student of Anja, is the leader of Purple Clouds today. The latest triumph of Purple Clouds was celebrated when they won the competition of the Total Oriental Festival 2022 as first place in the category 'Oriental Fantasy' and as second place in the category 'Folklore'.

Today, Purple Clouds will present you a small show containing two choreographies. Starting with a dynamical veil choreography, 'Unveiled' will carry you away into the exciting world of oriental fantasy. To conclude the evening, the second performance is an energizing tribal fusion drum solo. Let the Purple Clouds enchant you!

Today performing for you:

Unveiled
Choreography: Susanne Schönbrunn
Music: Raul Ferrando - Unveiled

Drum Solo
Choreography: Eliana Hofmann
Music: Artem Uzunov - Momentum

Contact: Hartwig.Susanne@web.de



Fun fact: Almost all of the participants of Purple Clouds have studied and/or got a PhD at KIT. Furthermore, there are five PhDs among them.

Physikertheater

The Physikertheater (Physicists' Theater) is an association of theater-loving physicists, geophysicists, meteorologists, and other students, but also members without any necessary connection to KIT. Despite having set up camp at the Physics Faculty and traditionally playing in the Gaede Lecture Hall since 2003, they are quite an inclusive bunch of people. The repertoire is as broad

as the membership base, past productions ranged from Monty Python, Fo and Frisch through various Dürrenmatts to Shakespeare and Stoppard. The next performances of the Physikertheater are already scheduled for next week: "Vineta" by Jura Soyfer. There are many stories of sunken cities, be it Atlantis, Thule or Rungholt. However, it is said of Vineta that the residents cannot or do not want to accept the sinking - and they 'live' on. Performances will take place on 3rd December at 20:00 and 4th December at 17:00.



"I will tell you how I lived in Vineta, in the lost city. I spent my whole life there. And there's also something to be learned from history, girl. That we have to be alive, you know?" – Jonny



Physikerchor

The Physikerchor Karlsruhe (physicists' choir) was formed by physics students in 2005 and has since been an integral part of the student cultural life at KIT in Karlsruhe. We are a diverse group of students and employees from various disciplines, united by the joy of singing together. Our repertoire spans six centuries of a cappella choir music in many different languages, reaching from traditional English choral music to Russian and Swedish church music of the 20th century as well as modern pop music in German, English and

Finnish.

Tourduon – Quand Je Bois du Vin Clairet (Französisches Trinklied, 1530)
Mas Que Nada (Sérgio Mendes, 1966. Arr.: Jorge Ben und Bernhard Hofmann)
April Is in My Mistress' Face (Thomas Morley, 1594)
Sommarpsalm (Waldemar Åhlén, 1933)
The Ape, the Monkey and Baboon (Thomas Weelkes, 1608)
If Ye Love Me (Thomas Tallis, 1565. Text nach Johannes 14, 15-17)
Engel (Rammstein, 1997. Arr.: Oliver Gies)
Cosmic Gall (John Updike, 1960. Arr.: Christian Schramm, 2018)

Conductor: Benjamin Förster
Homepage: physikerchor.de,
Contact: derphysikerchor@gmx.de



Sa

Program

Sunday 27/11 (Campus South)

7:00

9:00

Physics Talks: Particle Physics Experiment Gaede HS	Physics Talks: Micro-/ Nanophysics 1 Otto-Lehmann-HS	Physics and Profession 4 Kl. HS A	Workshop 5: Sagen Sie mir, was ich verdienen soll – mein Wert fürs Unternehmen 229.3	Workshop 6: Salary negotiations training Kl. HS B
--------------------------------------------------------------	---------------------------------------------------------------	-----------------------------------------	-----------------------------------------------------------------------------------------------------	------------------------------------------------------------

Coffee Break

11:00

Physics Talks: Particle Physics Theory Gaede HS	Physics Talks: Micro-/ Nanophysics 2 Otto-Lehmann-HS	Physics and Profession 5 Kl. HS A	Workshop 5: Sagen Sie mir, was ich verdienen soll – mein Wert fürs Unternehmen 229.3	Workshop 6: Salary negotiations training Kl. HS B
----------------------------------------------------------	---------------------------------------------------------------	-----------------------------------------	-----------------------------------------------------------------------------------------------------	------------------------------------------------------------

13:00

Lunch Break

Keynote Physics Talk: Particle Physics Theory
Gaede HS

Keynote Physics Talk: Microstructure of
Materials and Systems Otto-Leh.-HS

15:00

Keynote Physics Talk: Particle Physics
Experiment
Gaede HS

Keynote Physics Talk: Dark Matter
Otto-Lehmann-HS

Farewell

Gaede HS

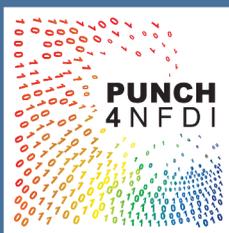
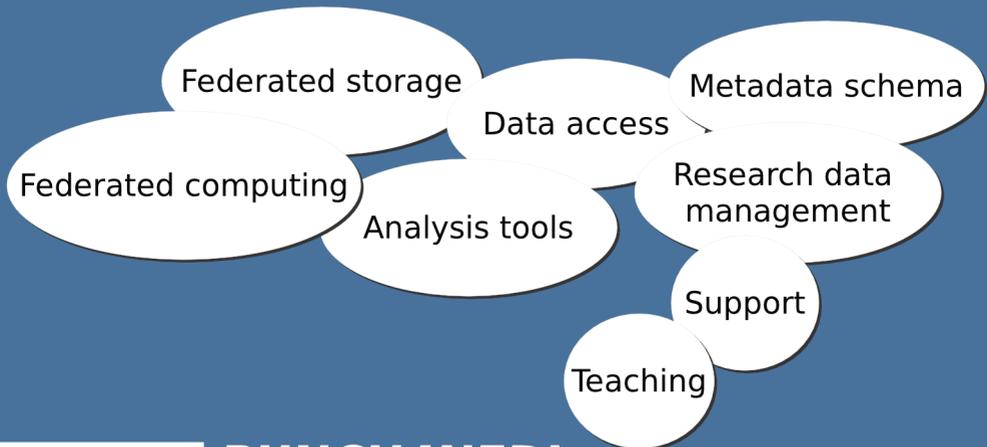
Coffee

Gaede Foyer

17:00

19:00

21:00



PUNCH4NFDI

The consortium of particle, astroparticle, astro-, hadron and nuclear physics in the German National Research Data Infrastructure (NFDI) supports **EQUAL OPPORTUNITIES** in physics.

Visit our website for open positions.
www.punch4nfdi.de



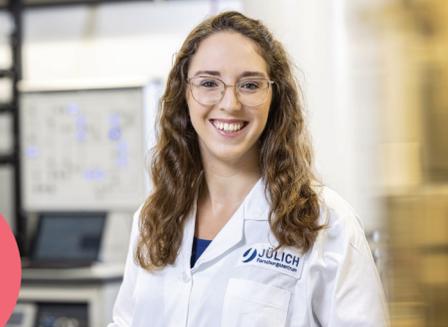
YOU ARE PASSIONATE ABOUT SCIENCE? SO ARE WE!

Conducting research for a changing society: This is what drives us at Forschungszentrum Jülich. We aim to tackle the grand societal challenges of our time and conduct research into the possibilities of a digitized society, a climate-friendly energy system, and a resource-efficient economy. Work together with more than 7,000 employees in one of Europe's biggest research centres and help us to shape change!



www.fz-juelich.de/careers

Become part of Forschungszentrum Jülich!



"I'm thrilled about the collaborative working atmosphere and high-quality equipment at Jülich, which make my research a lot easier."

Anne Schmidt
 Physicist / Doctoral researcher, Peter Grünberg Institute – Semiconductor Nanoelectronics

Keynote Physics Talks

Quo vadis, Higgs boson?

Ramona Gröber (Università di Padova and INFN, Sezione di Padova)

The Higgs boson has recently celebrated the 10th birthday of its discovery. In the meanwhile, we have learned a lot about its properties, but there is still much more to be learned... In this talk, I will give an overview of what we already know about it and what there is still to be understood. Furthermore, I will discuss the implications to the unanswered questions of the Standard Model of particle physics.

Category: Particle Physics Theory

Sunday
14:00-14:45

Flachbau, Gaede-Hörsaal
Campus South

Beyond particles - What the Higgs boson tells us about the universe

Monica Dunford (University of Heidelberg)

The discovery of the Higgs boson in 2012 completed the particle content of the Standard Model of particle physics. This particle, however, is the only scalar particle we know of and through its unique properties and interactions it plays a critical role in the evolution of our universe. In this talk, I will discuss how the tiniest of particles can affect the development of some of the biggest structures of our universe. I will highlight how the Higgs boson interacts with other particles as well as with itself and how this self-interaction may be the critical aspect to explaining the matter to anti-matter differences that we observe today. Finally, I will touch upon the Higgs boson's connection to dark matter and how it can be used as a tool to reveal the dark universe.

Category: Particle Physics Experiment

Sunday
14:45-15:30

Flachbau, Gaede-Hörsaal
Campus South



Keynote Physics Talks

On the self-similarity of structural evolution of nanoporous gold

Erica Lilleodden (Fraunhofer-Institut für Mikrostruktur von Werkstoffen und Systemen IMWS)

This talk addresses the validity of the commonly assumed self-similarity of the structural evolution of nanoporous gold. To this extent, a quantitative study of the salient structural parameters identified from so-called 'representative volumes' of the bicontinuous nanoporous gold (NPG) network has been carried out and is based on a variety of characterization approaches. 3D-focused ion beam tomography applied to as-dealloyed and isothermally annealed NPG samples provide direct assessment of topological characteristics, while TEM identifies the evolution of defect distributions. After identifying sufficiently large representative volumes, we show that the ligament width distributions coarsen in a sufficiently self-similar, time-invariant manner, while the scaled connectivity density shows a self-similar ligament network topology. Using these critical parameters, namely mean ligament diameter and connectivity density, the Gibson–Ashby scaling laws for the mechanical response of cellular materials are revisited. The inappropriateness of directly applying the Gibson–Ashby model to NPG is demonstrated by comparing finite element method compression simulations of both the NPG reconstruction and that of the Gibson–Ashby solid model; rather than the solid volume fraction, we show that an effective load-bearing ring structure governs elastic behaviour. On the other hand, TEM investigations show a breakdown in self-similarity of internal microstructure of the ligaments themselves, and may explain some of the variations in the mechanical behavior in the plastic regime. The consequences of the results will be placed the context of tailoring nanoporous metals for targeted applications.

Category: Microstructure of Materials and Systems

Sunday
14:00-14:45

Flachbau, Otto-Lehmann-Hörsaal
Campus South

Towards the lightest dark matter in direct searches

Belina von Krosigk (KIT)

In the last decades, astronomical observations have consistently indicated that most of the matter in the Universe remains hidden to even the most sensitive telescopes because it is nonluminous - because it is dark. Observing the respective dark matter particles became one of the most tantalizing endeavors of modern physics. A new generation of large exposure direct search experiments is at the ready to observe weak-scale dark matter particles, with their successors already in the planning. At the same time a new era has begun towards a direct detection of ever lighter dark matter candidates. Novel detector designs are reaching ultra-low detection thresholds with which new detection channels can be exploited. State-of-the-art direct detection searches most sensitive to light dark matter will be reviewed together with an outlook on where the near future is expected to take us in this quest towards dark matter discovery in the laboratory.

Sunday
14:45-15:30

Flachbau, Otto-Lehmann-Hörsaal
Campus South

Category: Dark Matter

Physics Talks

Physics Talks

Particle Physics (Experiment)

- Layout of the Interaction Region for Electron Proton Collisions in the LHeC and the FCC-eh Collider – Tiziana von Witzleben (CERN)
- Timing for pileup mitigation at the CMS detector at HL-LHC – Anna Albrecht (University of Hamburg)
- The LHCb Upgrade Vertex Locator – Tamaki Holly McGrath (University of Manchester)
- GNN-based Track and Vertex Finding at Belle II – Lea Reuter (KIT)
- Substructure tagging with mass and pt dependent variable-R jet clustering and a soft drop veto – Anna Benecke (UC Louvain)

Sunday
9:00 - 10:30

Flachbau, Gaede Hörsaal
Campus South

Physics Talks

Micro-/Nanophysics 1

- On the interplay between strain and temperature in germanium microstructures – Costanza Manganelli (IHP – Leibniz-Institut für innovative Mikroelektronik)
- Segregation to creep-induced planar faults in Ni-base SX superalloys – Zhongmin Long (KIT)
- Exploring dislocation networks for continuum modeling – Katrin Schulz (KIT/HKA)
- Attainments and Challenges of High Temperature Oxidation Resistance of Refractory High Entropy Alloys: Literature Review and Own Results – Bronislava Gorr (KIT)

Sunday
9:00 - 10:30

Flachbau, Otto-Lehmann-Hörsaal
Campus South

More Information
& full abstracts

physikerinnentagung.de



Timetable



Physics Talks

Particle Physics (Theory)

Sunday
11:00-12:30

Flachbau, Gaede Hörsaal
Campus South

- Numerical Investigation of Isospin Breaking Effects in 1+1D QED – Nuha Chreim (Bergische Universität Wuppertal)
- Non-thermal particle production after first-order phase transitions: what happens after bubbles collide? – Henda Mansour (University of Hamburg)
- Strong first-order electroweak phase transition in selected extended scalar sector models – Lisa Biermann (KIT)
- GW waves and the triple Higgs boson coupling in the 2HDM – María Olalla Olea Romacho (DESY)
- Higgs pair production at the HL-LHC in the 2HDM: insight into trilinear Higgs couplings – Kateryna Radchenko (DESY)
- q_T -resummation for Higgs production via quark annihilation – Rebecca von Kuk (DESY)

Physics Talks

Micro-/Nanophysics 2

Sunday
11:00-12:30

Flachbau, Otto-Lehmann-Hörsaal
Campus South

- Towards atom diffraction through graphene – Carina Kanitz (Deutsches Zentrum für Luft- und Raumfahrt)
- Hydrogenation of Pd nanoparticles at the nanoscale with in-situ TEM – Svetlana Korneychuk (KIT)
- Polymer to Carbon Transition: In Situ Pyrolysis of 3D Printed Microstructures – Qing Sun (KIT)
- Structure and reactivity of negatively charged platinum and palladium clusters – Karin Fink (KIT)

Physics and Profession 4

Sunday
9:00 - 10:30

Flachbau, Kleiner Hörsaal A
Campus South

My path from physics to climate action

Annika Richter (atmosfair gGmbH)

In this talk, I would like to give you insights into my job at the German climate NGO "atmosfair" and my career at the cross-section of energy, development and climate action. I hold a BSc in Physics from the University of Konstanz and an MSc in Sustainable Energy Engineering from NTNU in Trondheim and DTU in Copenhagen. After finishing my degree, I worked as a Trainee at the European Commission in the General Directorate for Research and Innovation. Since 2019, I am working as a project developer for climate change mitigation projects at "atmosfair". My day-to-day job involves identifying new project opportunities, designing impact monitoring schemes, analysing project data, negotiating collaboration agreements and much more. In my career, I have had the opportunity to work with numerous partners to support the energy transition in different African countries, including the uptake of modern electric cooking for households. My physics degree allowed me to do my job because it equipped me with technical understanding and skills, perseverance and the flexibility to choose my individual professional path.

Eine Ente im Ministerium

Dominique Sauer (BMBF)

„Was willst Du später mal werden, wenn Du groß bist?“ „Lehrerin!“ „Schriftstellerin!“ „Astronautin!“ Manche Berufswünsche hört man hingegen von Kindern selten. Besonders, wenn sie im Umfeld ziemlich unbekannt sind: Wissenschaftsmanagerin. Referentin. Physikerin.

1986 geboren, gehört Dominique Sauer zu den "Millenials". Diese krisengeschüttelte Generation zeichnet sich unter anderem dadurch aus, dass sie sich sehr gerne Optionen offenhält [1]. Dominiques Physikstudium sollte auch eben diesen Zweck erfüllen: ihr möglichst viele Türen offenhalten. Nur waren es letzten Endes ganz andere Türen als erwartet, die sich tatsächlich öffneten. Ihr Weg führte sie vom Studium an der Technischen Universität Darmstadt ins Wissenschaftsmanagement am Karlsruher Institut für Technologie, dann wieder in die Forschung zurück und schließlich als Referentin ins Bundesministerium für Bildung und Forschung

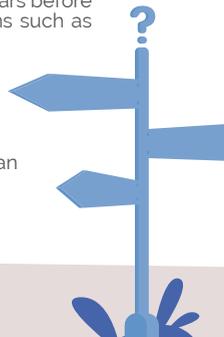
In ihrem Vortrag möchte sie euch ein Stück ihres bisherigen Weges mitnehmen und Einblicke geben, wie sich Physiker:innen im Wissenschaftsmanagement und in einer Bundesbehörde so schlagen: was hilfreich dafür ist, was die Tätigkeiten mit sich bringen und natürlich: was das alles mit Enten zu tun hat.

[1] https://de.wikipedia.org/wiki/Generation_Y, abgerufen: 07.10.2022

Patent Attorney Life as a Physicist

Gabriele Honecker

I will give a glimpse into the training and work life as a German and European patent attorney. After spending nearly 20 years training and working on temporary jobs in academia as a string theorist, in 2018 I decided to change my career path and started my by now completed training as both German and European patent attorney in a small patent law firm. To become a patent attorney, you need a M.Sc. (or equivalent) in a scientific or technological field and then train for at least three more years before completing a set of exams on patents, trademarks, designs and general legal questions such as inventors' rights. In daily life, you talk to inventors, discuss their ideas with them and translate the ideas into a legal language. You help with filing patent applications and the procedural steps to get a patent granted. You also help with protecting your client's interests against competitors. Being a physicist with international experience is ideal for becoming a patent attorney as we are trained on independent thinking and problem solution on a wide variety of topics, and the international patent sector operates to a large extent in English, with Germany being the largest single European patent market/country.



Physics and Profession 5

Sunday
11:00 - 12:30

Flachbau, Kleiner Hörsaal A
Campus South

Working as a physicist at the German Research Foundation

Johanna Kowol-Santen (DFG, German Research Foundation)

In my talk I would like to give you insights into my job at the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation), the central self-governing research funding organisation in Germany. With those insights in my day-to-day job I will also give you a short overview of the tasks of DFG and the funding portfolio as well as how the assessment and decision process works. After graduation (Diploma) at the University of Cologne University in 1994, I worked as scientific assistant at the Department for Geophysics with atmospheric science in the focus of my interests, earning my PhD in 1998 within the European project TOASTE-C (Transport of Ozone and Stratosphere Troposphere Exchange). Crossing the border between atmospheric physics and chemistry, I spent several years as postdoc at CNRS (Centre National de la Recherche Scientifique, Service d'Aéronomie) in Paris. Leaving active research, I assumed in 2002 the position of a Programme Officer at DFG Head Office in Bonn, taking over the responsibility as Programme Director for Condensed Matter Physics and Atmospheric Science in 2005. From 2008 I was heading the Division of Chemistry and Process Engineering, in 2019 I took over the responsibility as Head of Division for Physics and Chemistry, since 2015 I am also Deputy Head of the Department of Scientific Affairs.

From physicist to IT executive – a path of many new beginnings

Daniela Lange (SAP)

In this talk, I would like to give you insights into my job at SAP and into live events and inspirations that took me onto this path. I started my career as a physics student at KIT, where I finished my Diplom in 1996. I also hold a PhD in physics from Clarkson University New York in collaboration with University of Connecticut and McGill University in Montreal. I recently complemented my physics and IT background with an Executive MBA from Mannheim Business School. I started at SAP as a software engineer, followed by multiple roles, living in India and US. Now, 20 years later, I am leading the product organization for our Payroll, Time Management, Compensation and Benefits products – a team of 40 different nationalities across the globe. I am also executive sponsor for a product initiative called "Business Beyond Bias", which aims at leveraging HR technology and machine learning to detect and prevent unconscious bias in HR decision-making processes. Finally, I would like to share my experience with you regarding women in leadership positions and juggling children and career.

Angewandte Geophysik - ein modernes Werkzeug zur Vorerkundung im Bauwesen

Nicole Kuntz (GGU)

Während sich die Allgemeine Geophysik mit dem physikalischen Aufbau des Erdkörpers beschäftigt, konzentriert sich die Angewandte Geophysik auf die Untersuchung der oberen Erdkruste mit verschiedensten Aufgabenstellungen in Bereichen Energie, Rohstoffe und Umwelt. Insbesondere im Bereich des Bauwesens spielt die Geophysik eine immer größere Rolle. Denn hier werden die indirekten Verfahren zerstörungsfrei von der Oberfläche aus, ohne direkten Eingriff in die Substanz, großräumig zur Vorerkundung des Untergrundes eingesetzt und erhält dabei Informationen über Aufbau, Struktur und Zustand des Untergrundes durch die Interpretation physikalischer Messwerte. Das Ziel des Vortrags wird die Vermittlung einer realistischen, praxisnahen Vorstellung der Einsetzbarkeit geophysikalischer Methoden anhand ausgewählter Fallbeispiele sein.

Workshop 5

Sagen Sie mir, was ich verdienen soll - mein Wert fürs Unternehmen

Sunday
9:00 - 10:30 & 11:00-12:30

Flachbau, Room 229.3
Campus South

This workshop is for pre-registered participants only!

Zielsetzung des Workshops ist es, Impulse zu geben zur Reflexion zum Thema Gehaltsverhandlung und zur Darstellung des eigenen Mehrwerts für den zukünftigen Arbeitgeber. Mögliche Inhalte/Themenschwerpunkte des Workshops können sein:

- Was ist mein Produkt = mein Alleinstellungsmerkmal bzw. Mehrwert für das Unternehmen? (Eigene Stärken bewusst machen und kompetenzbasiert beschreiben.)
- Was bin ich wert? (Welche Haltung habe ich zum Thema Geld + Gehalt? Welche selbst gebauten Stolperfallen, z. B. Glaubenssätze hindern mich daran, angemessene Forderungen zu stellen?)
- Wie mache ich meinem zukünftigen Arbeitgeber meinen Mehrwert bewusst? (Das eigene Maß für den souveränen Auftritt finden; Bedeutung von nonverbaler Kommunikation (Kleidung, Raumgestaltung, Blickkontakt))
- Welche Rolle spielen Geschlechterstereotype, Geschlechterrollen und Rollenerwartungen bei diesem Thema?

Target groups: female MA students, female PhD candidates and female postdocs who consider a change into industry

Trainer: Karin Doderer

Workshop 6

Salary negotiations training

Sunday
9:00 - 10:30 & 11:00-12:30

Online (Zoom)
Flachbau, Kleiner Hörsaal B
Campus South

This workshop is for pre-registered participants only!

This workshop will take place exclusively online via zoom! In-person participants who are registered for this online workshop can use Kleiner Hörsaal B for online participation. Please bring your own devices and headphones.

No own devices are needed. Here, participants learn what starting salaries are common by specialty and sector, how to determine their market value, what to pay attention to in applications and salary interviews, and what else is important.

Target groups: female MA students, female PhD candidates and female postdocs who consider a change into industry

Trainer: Tina Groll

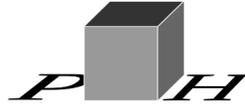
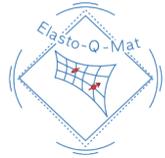


Thank you for coming
We are happy that you came!

Good
bye

Internal Supporters

CRC TRR 257, CRC 1173, KCETA, KSETA, CRC 288, CRC Waves2Weather (TRR 165), CRC 1441, ExcCluster/ 3DMM2O, Helmholtz Energy, Institute for Astroparticle Physics (IAP), Gender Equity 2, Karlsruhe Institute of Technology (KIT)



External Sponsors

Bundesamt für die Sicherheit der nuklearen Entsorgung, Carl Zeiss AG, d-fine GmbH, Forschungszentrum Jülich GmbH, HighFinesse GmbH, Infineon Technologies AG, Leica Microsystems GmbH, Pfeiffer Vacuum GmbH, PUNCH4NFDI (DESY), Robert Bosch GmbH, Spektrum der Wissenschaft Verlagsgesellschaft mbH, Trumpf SE+ Co. KG, X-FAB Global Services GmbH



Seeing beyond



Support

The conference is also supported by the Exzellenzstrategie des Bundes und der Länder, by the Deutsche Physikalische Gesellschaft (DPG) and the Arbeitskreis Chancengleichheit (AKC).



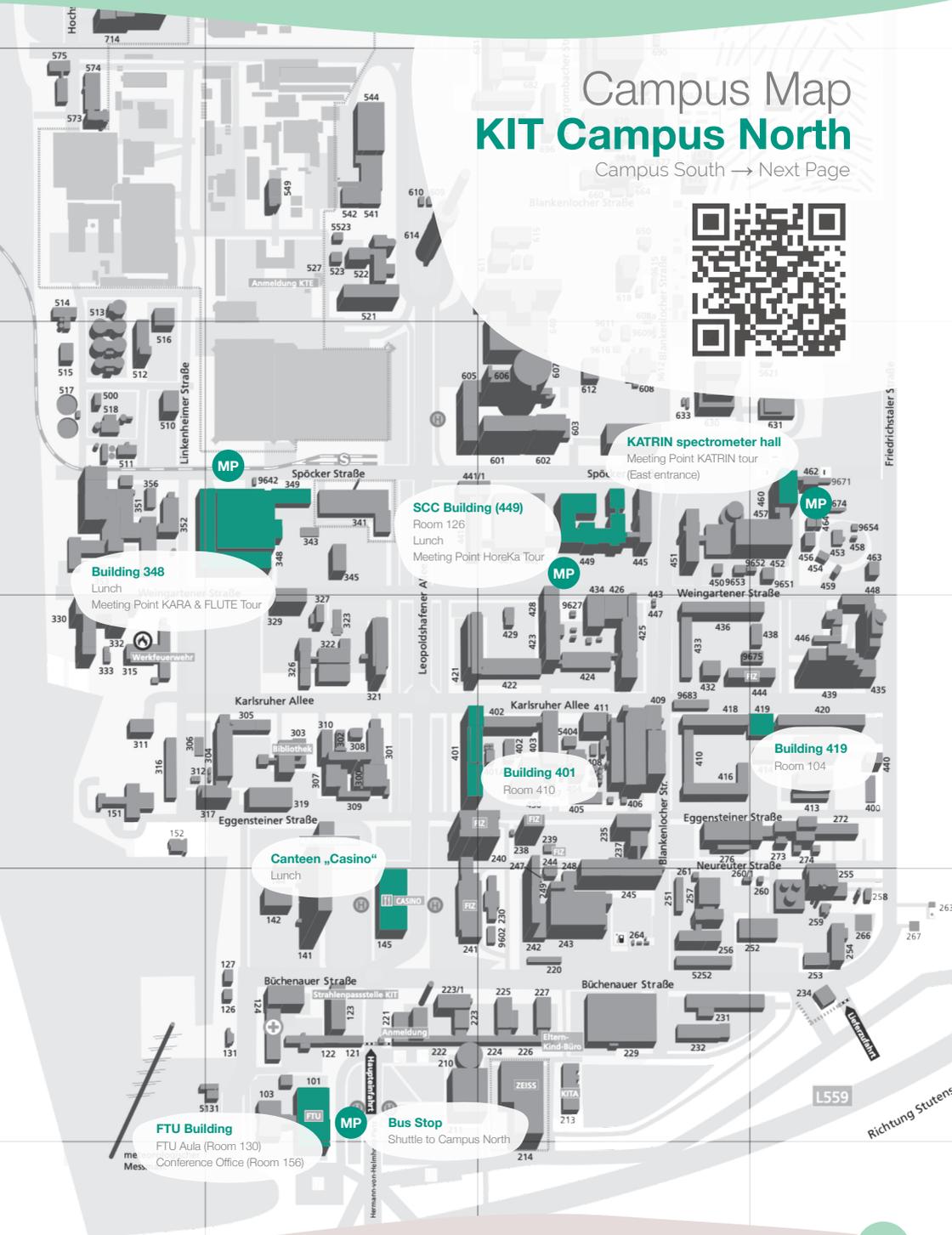
Baden-Württemberg
MINISTRY OF SCIENCE, RESEARCH AND ARTS



Campus Map

KIT Campus North

Campus South → Next Page



Building 348

Lunch
Meeting Point KARA & FLUTE Tour

SCC Building (449)

Room 126
Lunch
Meeting Point HoreKa Tour

KATRIN spectrometer hall

Meeting Point KATRIN tour
(East entrance)

Building 401

Room 410-405

Building 419

Room 104

Canteen „Casino“

Lunch

FTU Building

FTU Aula (Room 130)
Conference Office (Room 156)

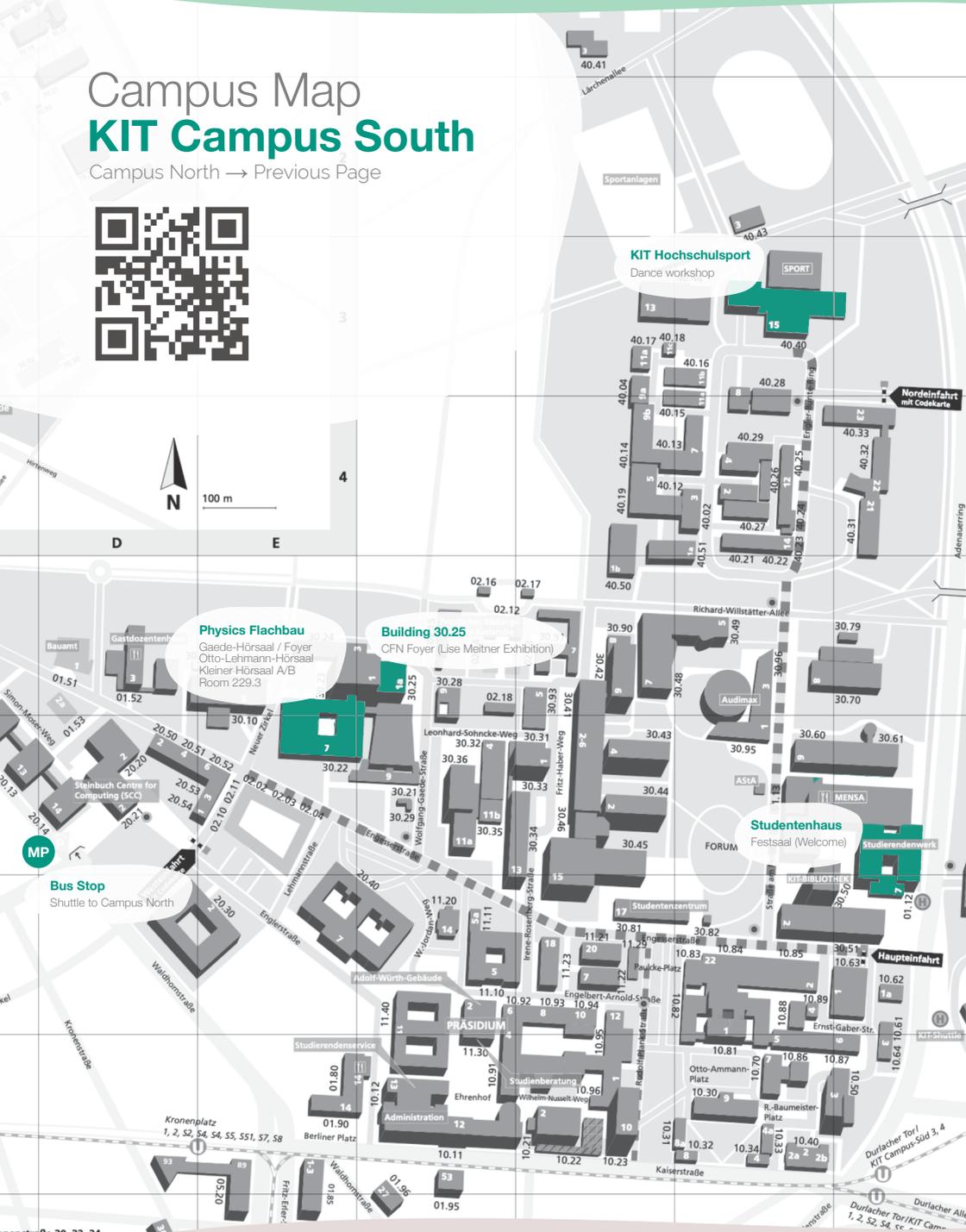
Bus Stop

Shuttle to Campus North

Campus Map

KIT Campus South

Campus North → Previous Page



onstraße 30, 32, 34
b.-Nr. 01.92