

# YEARBOOK 2022



Yearbook 2022

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The Rectorate of TU Dortmund University: President Prof. Manfred Bayer with Vice President Research Prof. Nele McElvany, Vice President Finance Prof. Gerhard Schembecker, Vice President International Affairs Prof. Tessa Flatten, Chancellor Albrecht Ehlers and Vice President Academic Affairs Prof. Wiebke Möhring (from left to right).

**Dear readers,**

Every year, the TU Dortmund University yearbook offers a review of the events that shaped university life over the previous year. Whether it's research or teaching, campus or sustainability, start-ups or networking – get an overview of the various areas of our university and find the key facts and figures on the individual topics.

After two years of the pandemic, it was a great pleasure for everyone to see teaching come back to our university without any restrictions in the 2022 summer semester. This has made learning easier for our students and also revitalized the campus: Traditional such as the Summer Festival (p. 39), the Campus Run (p. 39) and the Academic Anniversary Celebration (p. 43) were able to take place as usual. In the 2022/23 winter semester, 5,032 young people began their studies at TU Dortmund University – a slight increase, in contrast to the national trend. With these new arrivals, the university now has a total of 32,476 students (p. 19). With new English master's courses such as "Religion, Ethics and Politics" (p. 25), we are managing to attract more and more international students. Currently, 16 percent of TU students have a foreign passport.

The war against Ukraine in 2022 also required special commitment and solidarity from German univer-

sities: In the spring, the Association of Friends of TU Dortmund University immediately set up an aid fund for students affected by the war (p. 56). Throughout the year, academics who had fled were also taken on by a guest program at TU Dortmund University (p. 56). The energy crisis, triggered by the war at the same time, called for a wide range of measures to save natural gas and electricity. In the 2022/23 heating period, TU Dortmund University managed to save well over 20 percent on gas. Lowering room temperatures to 19 degrees has played a major role in this (p. 53). The crisis clearly demonstrates just how urgent the energy transition is. With a new photovoltaic system and a large wind turbine, we want to self-produce more electricity from renewable energies in the future (p. 53).

Several major research projects have also been initiated: In February, the University Alliance Ruhr signed the expanded cooperation agreement for the Research Alliance Ruhr, a top-class international research alliance which the state of North Rhine-Westphalia is providing with 123 million euros in funding until 2025 (p. 30). TU Dortmund University recorded the first appointments for the Research Alliance, including a Humboldt Professorship for the physicist Edvardas Narevicius (p. 30). In September, the Lamarr Institute for Machine Learning and Artificial Intelli-

gence was opened (p. 9), researching algorithms for intelligent systems that are powerful, sustainable and trustworthy. In September, the topping-out ceremony was held for our new research building "Center for Advanced Liquid-Phase Engineering Dortmund" (CAL-EDO) (p. 8), where around 100 scientists will conduct research on innovative solvents as of 2025.

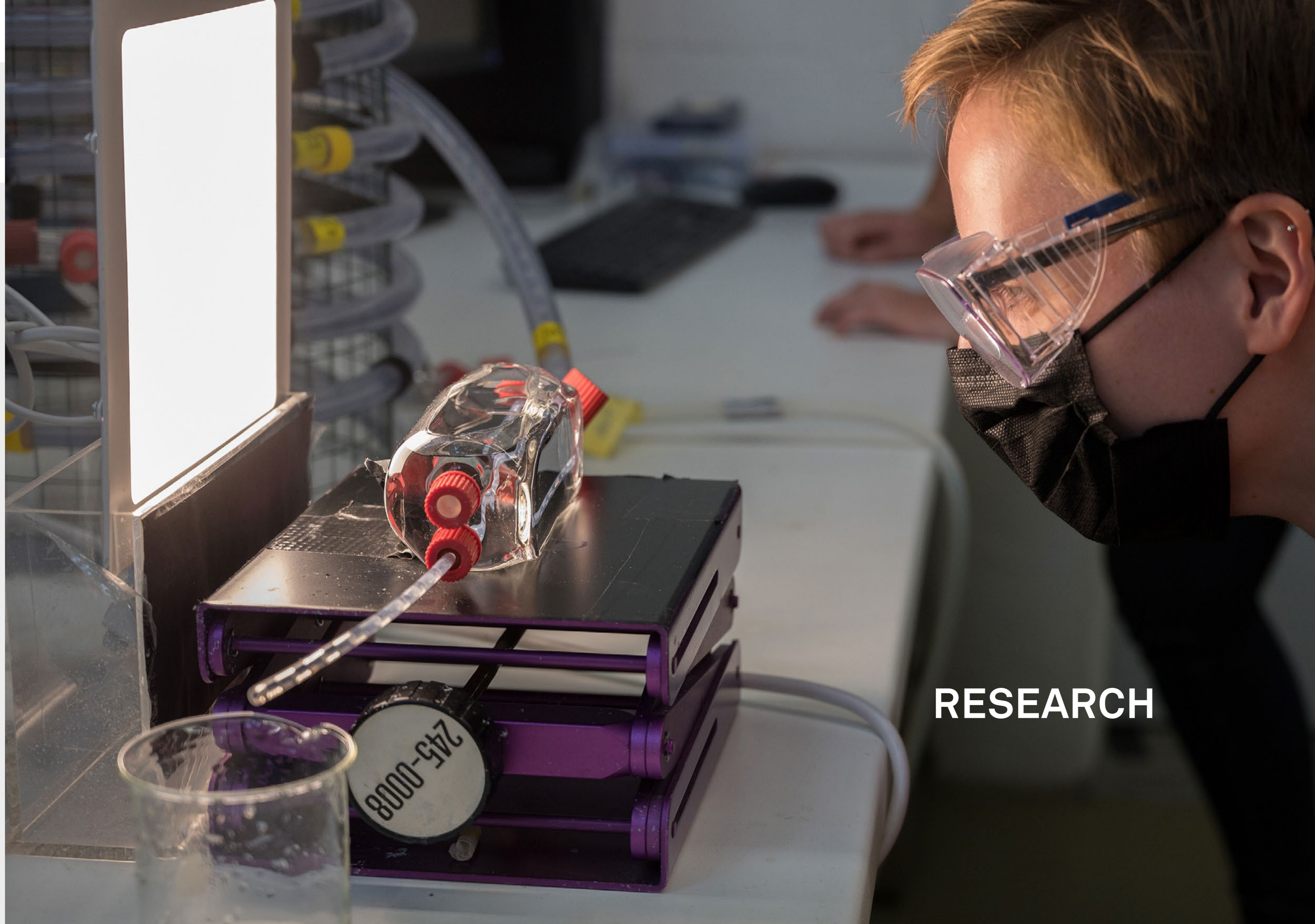
You will find out more about the series of events that made up 2022 on the following pages.

Kind regards,

Prof. Manfred Bayer

in July 2023

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# RESEARCH

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January | Publication in *Nature Light*

**Investigating the non-linearities of a laser**



Christoph Lange, Professor of Terahertz Spectroscopy at the Department of Physics, and colleagues from Germany, France, Sweden and the United Kingdom have succeeded in measuring the non-linearities of a technologically relevant and extremely complex terahertz laser. The work is published in *Nature Light: Science & Applications*.

September | Publication in *Nano Letters*

**More photons for quantum communication**



In *Nano Letters*, researchers from Germany and Austria presented a new method for generating photons that can double the information rate in future quantum communication networks. The work is based on a theoretical prediction made by the team led by Dr. Doris Reiter from the Chair of Theoretical Physics.

September | Publication in *Nature*

**Kink found in plasma stream**



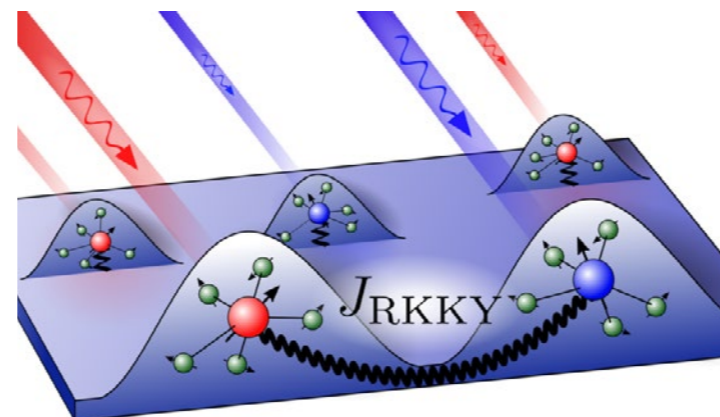
An international team of collaborators was able to gain a unique look at what is happening in an active galaxy core. Using data collected from telescopes around the world, the team was able to detect a long-suspected process in the plasma jet of the galaxy's active core, BL Lacertae. This observation is so spectacular that the work was published in the journal *Nature*. As-

stant professor, Dr. Dominik Elsässer from the Chair of Astroparticle Physics of the Department of Physics was also involved in the observations. To collect the data, he worked with schoolchildren from Würzburg, who, under his direction, regularly monitor the brightness of active galaxy nuclei in a student lab.

November | Publication in *Physical Review Letters*

**Question of interaction between spins solved**

It has long been known and scientifically proven that spins in ensembles of semiconductor quantum dots interact with one another. A team of theoretical solid-state physicists led by Prof. Frithjof Anders was able to solve the underlying mechanism. Their findings are published in the journal *Physical Review Letters*. The graphic shows quantum dots on a surface whose spins – stimulated by laser pulses (red and blue arrows) – interact with each other (black line).



October | Publication in *Communications Physics*

**Unknown three-particle state predicted**

Prof. Götz Uhrig, Dr. Gary Schmiedinghoff and Dr. Leanna Müller (from left to right) from the Chair of Theoretical Physics, alongside colleagues from the Los Alamos National Laboratory, USA, and the German Aerospace Center, Cologne, theoretically analyzed a solid-state system and discovered that three particles bind in a novel way. This three-particle interaction is a novelty in condensed matter theory and is described in the journal *Communications Physics*.



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Summer semester | Two publications

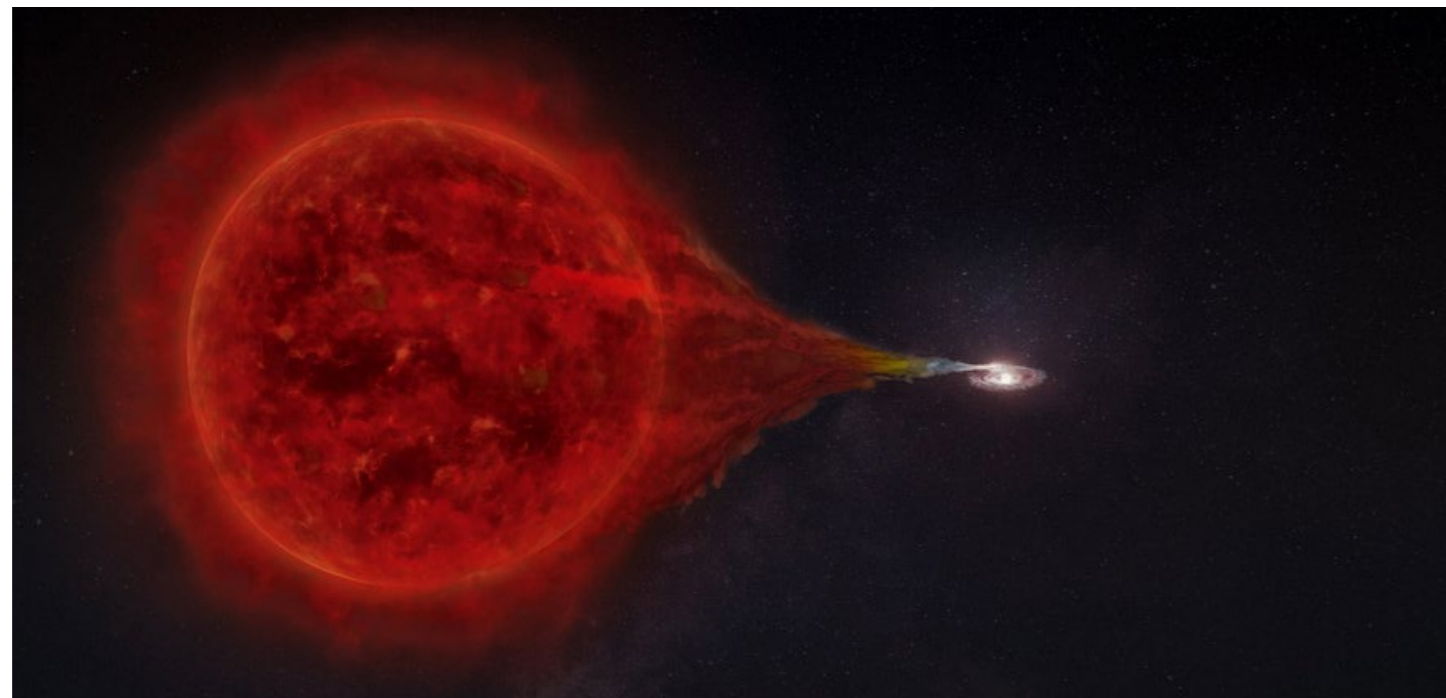
## Controlled crystal properties

Through international cooperation, physicists at TU Dortmund University made a breakthrough in researching and controlling the magnetic and optical properties of crystals. In *Nature Communications*, the group led by adjunct professor Dmitri Yakovlev published an article on how the magnetic properties of perovskite crystals can be precisely adjusted. In *Nature Photonics*, the group led by adjunct professor Ilya Akimov presents a system of interactions between light and magnetism that opens up completely new possibilities for optically controlled magnetism.



April | Publication in *Nature Astronomy*

## Explosion witnessed on vampire star



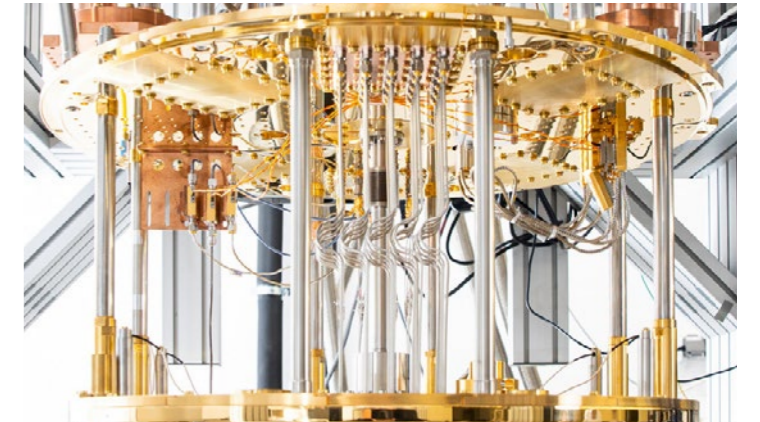
An international team, including Prof. Wolfgang Rhode and assistant professor Dr. Dominik Elsässer from the Chair of Astroparticle Physics of the Department of Physics detected high-energy gamma rays from a recurring nova in the Milky Way using the MAGIC telescopes on the Canary Island of La Palma. When a star dies, it first expands into a red giant star and then col-

lapses into a stellar remnant, a white dwarf (see illustration). These stellar remnants, also known as “vampire stars”, can then cause further gigantic explosions: This is called a recurring nova. The results are published in *Nature Astronomy*.

March | State funding

## Competence network launched

Over a dozen research institutions in NRW are merging to form the quantum computing network “EIN Quantum NRW”. The aim of this is to expand national technology leadership in the research and development of quantum technologies, train specialists and facilitate applications for the economy. TU Dortmund University is on board as a university partner. The network will be provided with up to 20 million euros over an initial period of five years, with 12.5 million coming from the state and 7.5 million from the institutions themselves.



February | Two publications

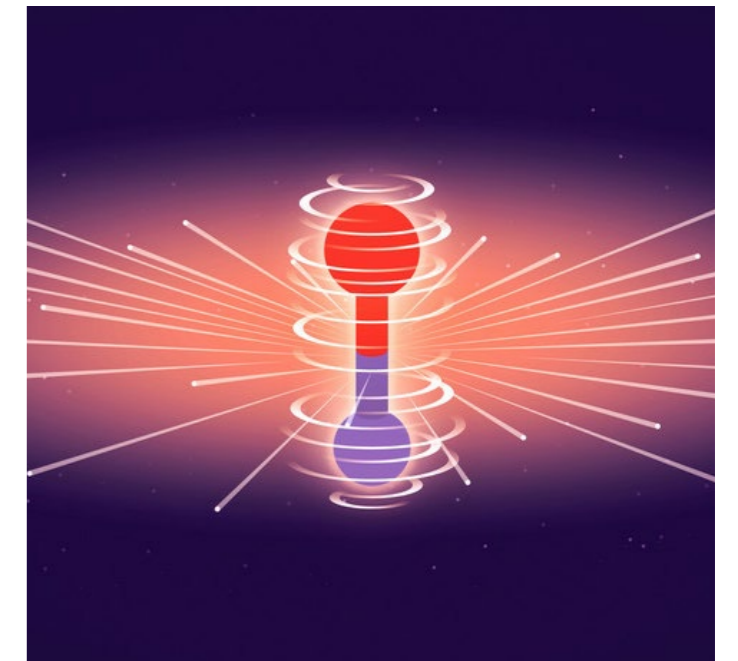
## LHCb collaboration studies rare decays



The Large Hadron Collider (LHC) is used to study particle decays produced by proton collisions. The LHCb collaboration, in which particle physicist Prof. Johannes Albrecht is involved, published new findings on the rare decay of a Bs particle into two muons in *Physical Review Letters* and *Physical Review D*.

January | Publication in *Science*

## Electron vibrations observed in molecules



Working with an international team, Wolfram Helml, junior professor for accelerator physics, published new findings on the photochemistry of molecular quantum systems in *Science*: Using a kind of stopwatch for ultrafast electron processes in atoms, they were able to observe coherent superpositions of core-excited states in molecules.

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September | Patent marketing

## Large 3D printer components

Scientists at TU Dortmund University developed a 3D printer that – unlike conventional ones – specializes in the production of large-volume components. The so-called “BigPrint” was invented by Prof. Bernd Künne, Tim Krautwald and Manuel Wissuwa from the Department of Mechanical Engineering. With the support of PROvendis, TU Dortmund University sold two patents on the device and the process to the Swiss company Niederberger Engineering AG. The company will continue developing the working prototype.



August | DFG funding

## New transfer project in mechanical engineering

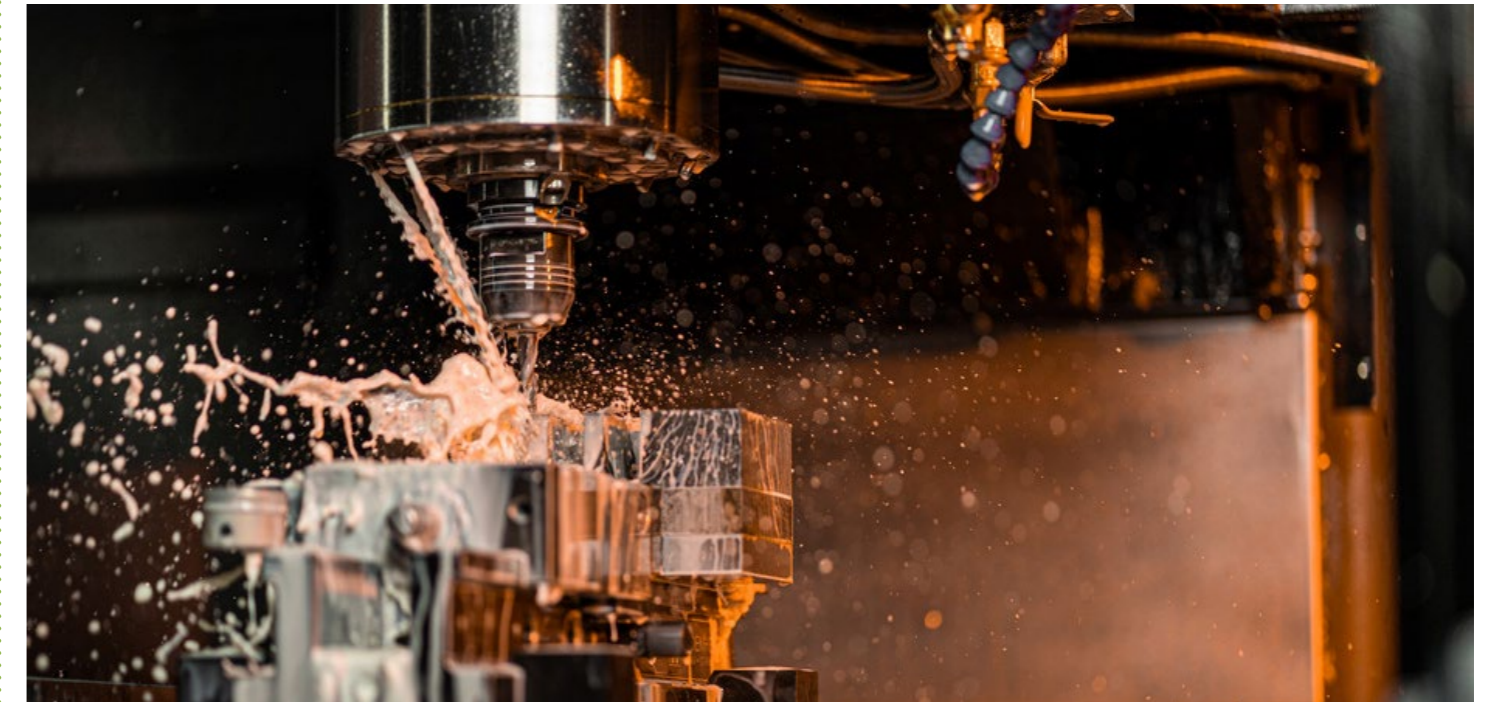


Prof. Dirk Biermann from the Department of Mechanical Engineering conducts research alongside the Fraunhofer Institute for Surface Engineering and Thin Films and partners from practice in order to improve single-lip and BTA deep drilling processes. The German Research Foundation (DFG) and the Fraunhofer-Gesellschaft are funding the project “Thin-film

sensor systems for guide rails to record forces, temperatures and wear during machining processes (layer sensors)” for three years. With the “Trilateral Transfer Projects” funding line, the DFG aims to accelerate the transfer of research results into industrial applications. As part of the project, the partners are developing a prototype for a sensor-based tool system.

November | DFG priority program

## Basic research into cooling lubricants



The Priority Program 2231 FluSimPro starts its second funding phase. Under the banner of “Efficient cooling, lubrication and transportation – coupled mechanical and fluid-dynamical simulation methods for efficient production processes”, scientists from TU Dortmund University are also researching cooling lubricants and their functions. The program has been allocated fund-

ing for a total of six years since 2020 by the German Research Foundation (DFG). In the second funding phase, a total of 4.6 million euros in funding is allocated to eleven interdisciplinary sub-projects from Germany and Austria. The Institute for Machining Technology (ISF) of the Department of Mechanical Engineering University is involved in three of these projects.

July | Aluminum recycling

## BBC shoots documentary footage at the IUL

André Schulze, a doctoral student supervised by Professor A. Erman Tekkaya at the Institute for Forming Technology and Lightweight Construction (IUL) of the Department of Mechanical Engineering, recycles aluminum chips into sheet metal and new products as part of his doctorate – and all without melting the chips down using a lot of energy. After finding out about the work at the IUL from British researchers, an editor from the BBC, British Broadcasting Corporation, begins filming the process for a documentary on the subject of sustainable metal processing.



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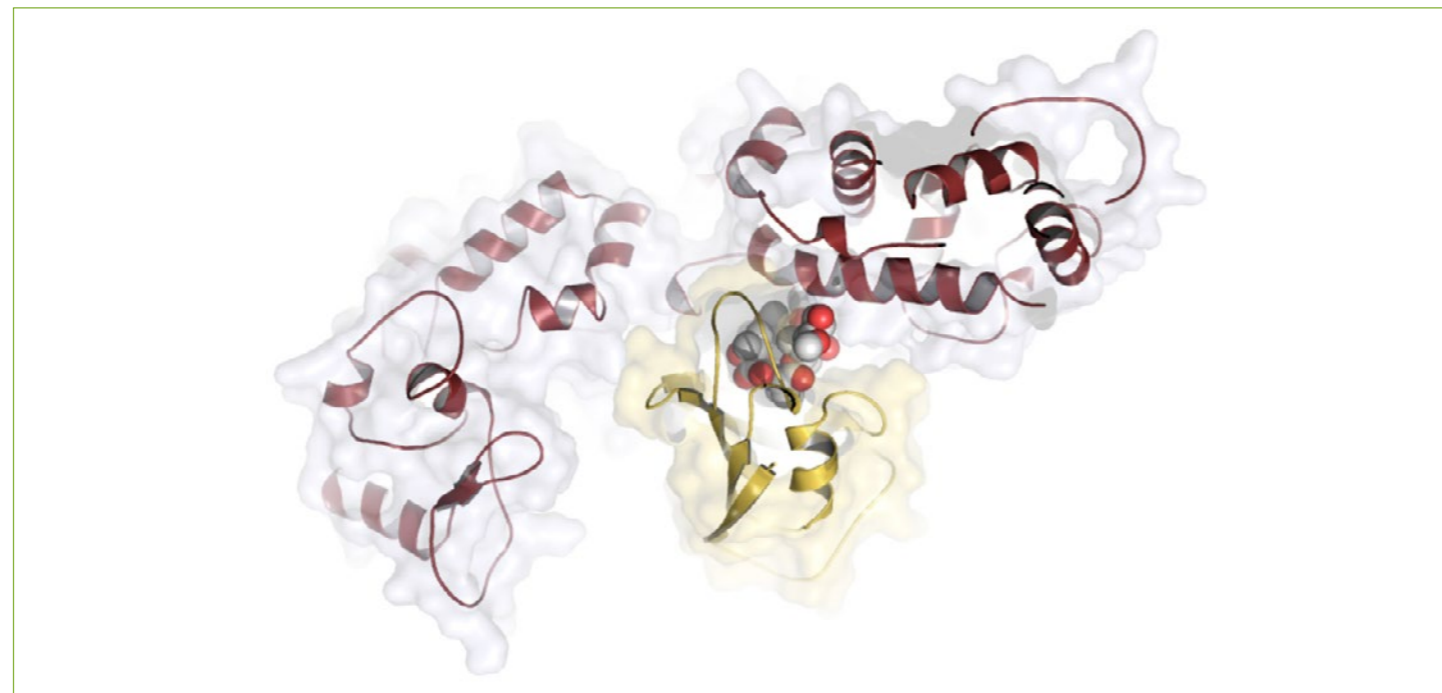
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April | Research network

## CANTAR receives 19.4 million euros in funding



TU Dortmund University is a partner in the new CANTAR research network, which is funded by the NRW Ministry of Culture and Science with 19.4 million euros over four years. The abbreviation stands for “cancer targeting”: Together, researchers from Cologne, Essen, Bonn, Aachen, Düsseldorf and Dortmund aim to close

the gap between basic research and clinical cancer research. They will develop new chemicals to identify and research specific cancer pathways. A total of 13 Dortmund researchers are involved. Prof. Daniel Rauh from the Department of Chemistry and Chemical Biology manages one of the four research areas.

March | Pharmaceutical technology

## Expansion of Drug Delivery Innovation Center

In 2017, TU Dortmund University founded the Drug Delivery Innovation Center (DDIC) in collaboration with Heinrich Heine University Düsseldorf and the companies Bayer AG, LB Bohle GmbH, Merck KGaA, and UCB S.A. from Belgium. Representatives from the world of science and industry work in this consortium to develop manufacturing processes and delivery forms for state-of-the-art drugs. More space is created for laboratories through a building extension. Prof. Gerhard Schembecker (third from left) from the Department of Bio- and Chemical Engineering attends the topping-out ceremony in Leverkusen.



April | Publication in *Angewandte Chemie*

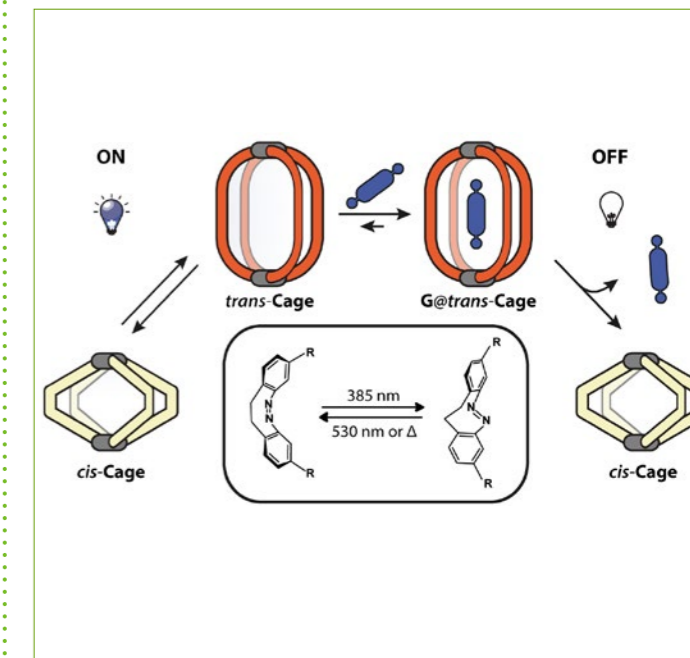
## Interface paves the way for efficient catalysts



In many biological processes, interfaces allow enzymes to function as catalysts. Dr. Giovanni Zamborlini (left) and Prof. Mirko Cinchetti (right) from the Department of Physics succeeded in constructing an interface at which these processes can be researched. The international team’s work is published in *Angewandte Chemie*.

February | Publication in *JACS*

## Research team stabilizes nano cages with light

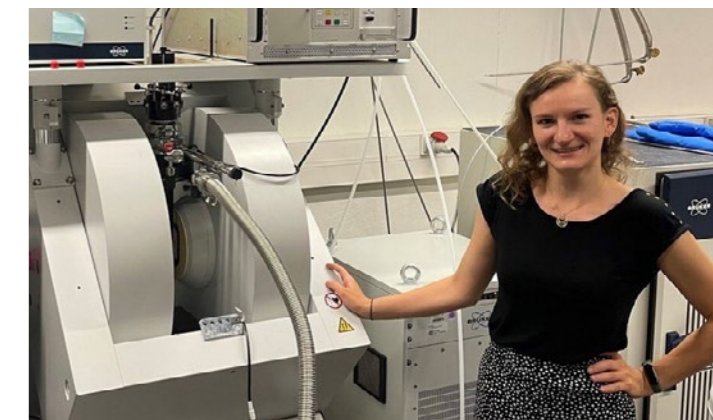


A team led by Prof. Guido Clever from the Department of Chemistry and Chemical Biology managed to use light to maintain certain self-assembling molecular structures with a cavity beyond thermodynamic equilibrium. The group publishes their work in the *Journal of the American Chemical Society*.

July | Publication in *Chemical Science*

## Unknown radical signal of a hydrogenase discovered

Hydrogenases are enzymes that optimize the reversible oxidation of molecular hydrogen and serve as role models for hydrogen production. A team led by JProf. Müge Kasanmascheff from TU Dortmund University and Prof. Thomas Happe from Ruhr-Universität Bochum discovered an unknown radical signal in a special oxygen-resistant hydrogenase (CbA5H) and characterized it comprehensively. The work is published in the journal *Chemical Science*. The lead author is Melanie Hegmanns (pictured) from TU Dortmund University.



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December | NRW Academy of Sciences an Arts

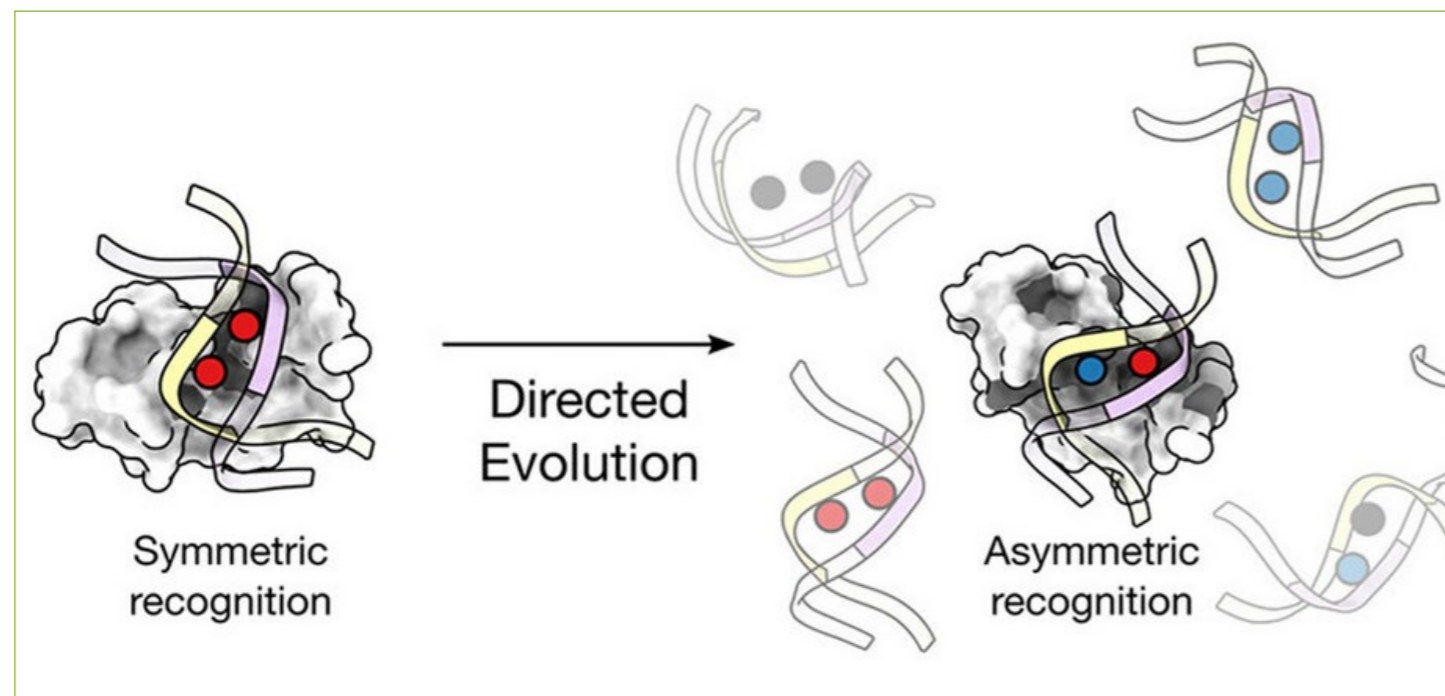
## TU chemists admitted to the Junges Kolleg

The Department of Chemistry and Chemical Biology celebrates a triple award: JProf. Max Hansmann (left), Dr. Elisabeth Kreidt (second from right) and Dr. Leonhard Urner (right) are admitted to the Young Academy of the North Rhine-Westphalian Academy of Sciences and Arts in 2023 and welcomed by President Prof. Julia B. Bolles-Wilson (second from left). A total of 17 scientists and artists were selected for their outstanding achievements. They each benefit from an annual grant of 10,000 euros each.



September | ERC Proof of Concept Grant

## Molecular probes for DNA analysis



Prof. Daniel Summerer from the Department of Chemistry and Chemical Biology receives an ERC Proof of Concept Grant from the European Research Council. This enables him to further develop cutting-edge molecular probes for DNA analysis. Prof. Summerer had already researched the concept for this as part of an ERC Consolidator Grant worth several millions: Using

directed evolution, his research group succeeded in creating protein probes that recognize a specific modification in the CG base sequence on both sides of the DNA double helix. With the funding of 150,000 euros, a test kit is now set to be produced in order to close the gap between pioneering research and the early phase of marketing.

15 September | Cutting-edge research

## Topping-out ceremony for new research building



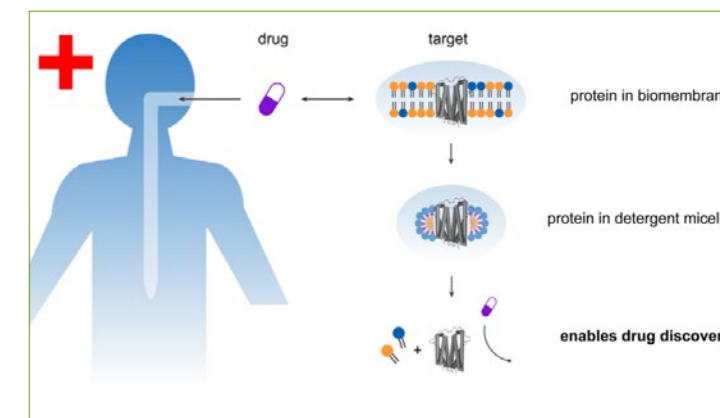
One year after the foundation stone was laid, the shell of the Center for Advanced Liquid-Phase Engineering Dortmund (CALEDO) was erected. Bau- und Liegenschaftsbetrieb NRW (BLB) thus holds a topping-out ceremony on the construction site on Otto-Hahn-Strasse, to which guests from the university, the city and the state are invited in addition to the construction companies involved in the project. As of 2025, the

new building will offer space for around 100 scientists who will research innovative solvents. Under the direction of Prof. Gabriele Sadowski (fourth from left), TU Dortmund University had raised around 72 million euros from the federal and state governments for the research building in a tough nationwide funding competition.

August | Publication in *Chemical Science*

## New soaps for drug discovery

The junior research group of Dr. Leonard Urner from the Department of Chemistry and Chemical Biology publishes new findings on how suitable soaps can be systematically used in the search for drugs. So far, it has been determined by trial and error which soaps can successfully dissolve the membrane proteins under examination. In cooperation with FU Berlin, Dr. Urner has now developed a mathematical prediction model based on experiments with scalable hybrid soaps. The results are published in *Chemical Science*.





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29 September | Continuous funding of cutting-edge research

## Lamarr Institute for Machine Learning and Artificial Intelligence opened

The Lamarr Institute for Machine Learning and Artificial Intelligence is opened in the presence of NRW Minister President Hendrik Wüst (fourth from right) and NRW Minister of Science Ina Brandes (fourth from left). The top research institute designs a new generation of artificial intelligence that is powerful, sustainable and trustworthy and is intended to help solve central challenges in business and society.

TU Dortmund University, the University of Bonn and the Fraunhofer Institutes for Intelligent Analysis and Information Systems IAIS and for Material Flow and for Material Flow and Logistics IML all collaborate in the Lamarr Institute. The new institute emerges from the previous Competence Center Machine Learning Rhine-Ruhr (ML2R), which has been funded as a project for a limited period since 2018 and was made permanent in

summer 2022. The federal government and the state of North Rhine-Westphalia will initially provide around 126 million euros of permanent funding until 2028. The money makes it possible for up to eleven new AI professorships to be filled at both partner universities and will benefit 32 existing professorships that will be incorporated into the Lamarr Institute.

The Lamarr Institute is headed by Prof. Stefan Wrobel (third from right) and Prof. Christian Bauckhage (second from right) from the University of Bonn and the Fraunhofer IAIS as well as Prof. Michael ten Hompel (right) from TU Dortmund University and the Fraunhofer IML and Prof. Katharina Morik (not pictured) from TU Dortmund University. The institute is named after the Austrian-American inventor Hedy Lamarr (1914–2000).



September | Summer school

## Machine learning under resource constraints

The Collaborative Research Center 876 organizes its sixth international summer school on the topic of machine learning under resource constraints. Around 70 young scientists from eleven countries attend the hybrid event in person, with over 200 guests taking part in the 14 lectures digitally. The content focuses on data analysis – machine learning, data mining, statistics – embedded systems and the application of the analysis methods shown.

November | Machine learning

## Researchers calculate the outcome of the World Cup

An international team led by Prof. Andreas Groll from the Department of Statistics uses machine learning to calculate the course of the tournament at the controversial World Cup in Qatar ahead of time. Brazil is the favorite with a 15 percent chance of winning, but the team also gave Argentina, the actual winners, an 11.2 percent chance of winning. The prognosis combines statistical models and socio-economic factors of the country of origin.

December | Machine learning and embedded systems

## Successful CRC ends after twelve years



The Collaborative Research Center (CRC) 876 “Providing Information by Resource-Constrained Data Analysis” funded by the German Research Foundation (DFG) and headed by Prof. Katharina Morik (first row, third from right) from the Department of Computer Science is set to terminate after three funding periods. By merging the research fields of machine learn-

ing and embedded systems, the CRC had already anticipated the trends and challenges of today back in 2011 and was a pioneer in its field. More than 80 researchers have completed their doctoral degrees in the integrated graduate school, headed by Prof. Wolfgang Rhode (first row, second from right) from the Department of Physics.

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March | I-Index

## Inflation reports researched by algorithm



The “Dortmund Center for Data-Based Media Analysis” (DoCMA) uses millions of newspaper articles to develop an inflation index, or I-Index for short, the evaluation of which is first published in the Handelsblatt in spring. An algorithm records how present the topic is in economic reporting and provides novel insights into how inflation is perceived by the public.

Professors Jörg Rahnenführer and Carsten Jentsch from the Department of Statistics, Erich Schubert from the Department of Computer Science, and Henrik Müller from the Institute of Journalism have joined forces in the DoCMA. The aim is to use the I-index to provide economic impulses for researching the dynamics of inflation.

November | Preprint publication

## Vulnerability discovered in messenger services

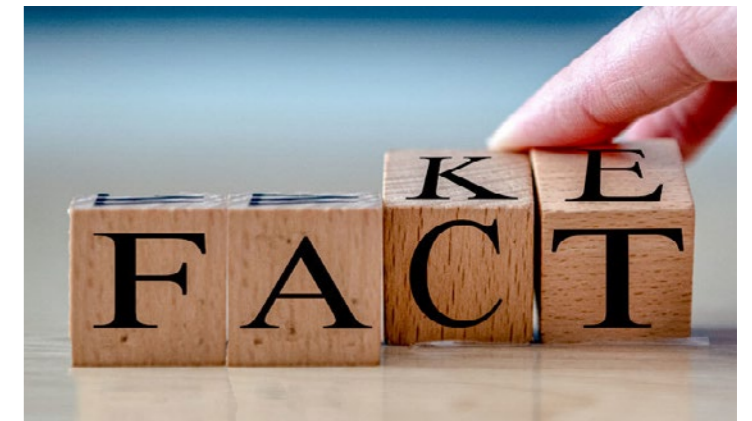
An international research team led by Dr. Theodor Schnitzler, who conducts research at the Research Center Trustworthy Data Science and Security of the University Alliance Ruhr, discovers a vulnerability in messenger services: Different locations of an individual in a user’s contact list can be distinguished from each other by measuring how long it takes for a message to be delivered. The results of the peer-reviewed paper will initially be published as a preprint and presented at an international symposium in the USA in 2023.



March | “noFake” project

## Fighting disinformation with artificial intelligence

In the fight against disinformation, the non-profit research center CORRECTIV and teams of scientists from Ruhr-Universität Bochum and TU Dortmund University join forces in the “noFake” project. With the help of fact checks by citizens and artificial intelligence, false reports are set to be recognized and refuted. The project is funded by the federal government to the tune of 1.33 million euros. The working group led by Prof. Tobias Gostomzyk from the Institute for Journalism at TU Dortmund University brings its expertise in media and internet law to the project.



November | Competence Center 5G.NRW

## Research on new mobile radio technology



NRW Economics Minister Mona Neubaur (front left) visits the LogisticsCampus Dortmund as part of 5G.NRWeek. The Competence Center 5G.NRW (CC5G.NRW), in which TU Dortmund University also plays a significant role, is presenting current exhibits here. The center has set itself the goal of promoting the 5G mobile communications standard and associated

digital innovations in NRW. Research is also already setting its sights on the next generation, 6G. Prof. Christian Wietfeld (second from left) from the Department of Electrical Engineering and Information Technology is both the Dortmund site spokesman for CC5G.NRW and the 6G research hub 6GEM funded by the Federal Ministry of Education and Research.

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December | Conference of Ministers of Education and Cultural Affairs

## Expert opinions on elementary schools

The Standing Scientific Committee of the Conference of Ministers of Education and Cultural Affairs presents an expert opinion to improve educational opportunities at elementary schools. The Institute for Development and Research in Mathematics Teaching (IEEM) at TU Dortmund University is involved in the report: Prof. Susanne Prediger is a member of the 16-strong committee, and Prof. Christoph Selter was brought on board as an author for the mathematics area. The report focuses on teaching basic skills such as reading, writing and mathematics.



March | Reading literacy

## Half a year of learning lost due to pandemic



The Center for Research on Education and School Development (IFS) publishes a survey on how the pandemic-related restrictions have affected the learning level of fourth-grade children: Compared to the reading skills of their peers before the pandemic, elementary school students in 2021 are missing out on half a year of learning on average. The reason for this is

the frequent change between remote and face-to-face teaching since the outbreak of the coronavirus in spring 2020. The representative data comes from the IFS school panel study, which examined over 4,000 children at 111 elementary schools in Germany between 2016 and 2021 under the direction of Prof. Nele McElvany.

June | Longitudinal study

## Pandemic has made children unhappier



Through a study at four elementary schools, Prof. Ricarda Steinmayr and her team from the Institute of Psychology found that the restrictions caused by the pandemic in spring 2020 affected the well-being of children. The surveys for the longitudinal study took place before the outbreak of the coronavirus and after the first lockdown in May/June. The results show

that positive mood and satisfaction with family life decreased – in all children. They have been particularly adversely affected from the infection control measures such as the closing of schools or sports clubs. The study appears in the *Journal of Happiness Studies*.

December | IFS study

## More language support needed for elementary schools

A team from the Center for Research on Education and School Development (IFS) uses data from 4,600 elementary school children to show that there are major differences among fourth graders in Germany when it comes to vocabulary. The differences in learning amount to as much as one whole school grade. There is a correlation with the family background, such as educational qualifications or mother tongue of the parents and the family's reading habits. The results make it clear that vocabulary in elementary school must be promoted in a targeted way.



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July | MERCUR funding

## Learn math better with virtual reality



The Mercator Research Center Ruhr (MERCUR) is funding a new project in which Prof. Jörg-Tobias Kuhn from the Department of Rehabilitation Sciences is involved. In the project “ELI-VR – Embodied Learning in Virtual Reality: Spatial-sensomotoric experience of number range ideas and control value systems for elementary school children”, together with a team from

the University of Duisburg-Essen, he aims to improve mathematics learning for elementary school children. Motor and sensory processes also play a key role in learning. The project explores the possibilities of virtual reality, which can combine spatial experiences of your own body with mathematical phenomena.

October | Research on gastronomy

## How knowledge is passed on in the kitchen

Prof. Maximiliane Wilkesmann (center) from the Department of Social Sciences and Prof. Uwe Wilkesmann (left) from the Center for Higher Education combine professional interests in their new book, which they publish alongside the former star chef Heiko Antoniewicz (right): Their new release titled “Hinterher ist man immer schlauer! Wissenstransfer in der gehobenen Gastronomie” (“You’re always smarter afterwards! Knowledge transfer in high-end gastronomy”) is based, among other things, on the many years of research conducted by the two scientists on knowledge transfer and knowledge management.



November | Cooperation with DJI

## Research partnership celebrates 20<sup>th</sup> anniversary



In 2002, the research partnership between the German Youth Institute (DJI) in Munich and TU Dortmund University was founded in Dortmund. The cooperation has been active in social, educational and youth welfare research for 20 years now and has also established itself in political consulting for federal, state and civil society organizations.

October | Project launch

## Compliance standards for SMEs

The Federal Ministry of Economics and Climate Protection and Project Management Jülich are financing the project “Empirical Development and Testing of a Compliance Standard for SMEs”. Under the direction of Prof. Andreas Hoffjan (fourth from left) from the Department of Economics, a compliance standard for SMEs is to be developed over the next two years. Bielefeld University and the SME Compliance Expert Council are also involved. The team meets at TU Dortmund University for the project launch.



2022 | Qualitative social research

## How older professionals could stay in their jobs



In the project “Exclusion and Inequality in Late Working Life”, Prof. Monika Reichert from the Department of Social Sciences examines the perspective of older employees: their experiences of exclusion and their willingness to work longer. Alongside Nele Penning, she presents her findings in Krakow, Vienna and Odense.

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March | Long-term study

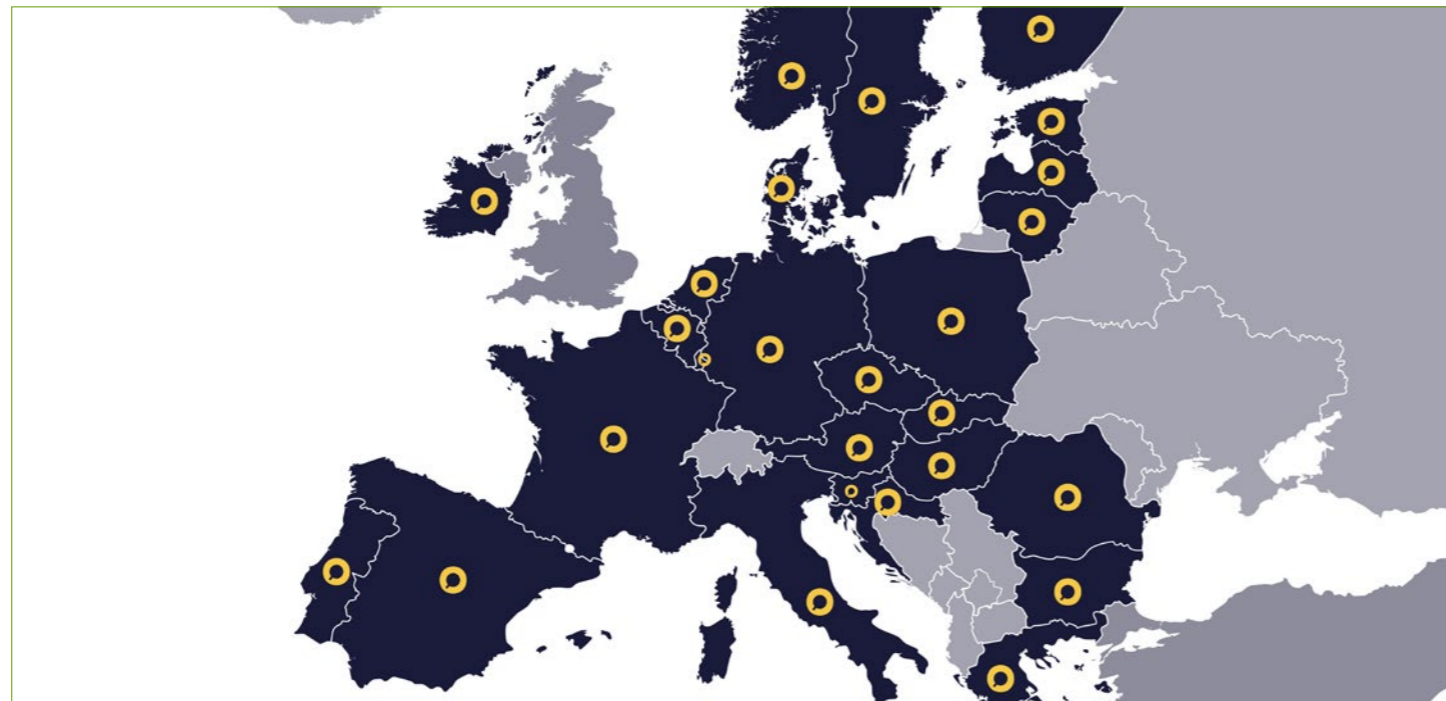
## Study questions the credibility of journalism

The Institute for Journalism (IJ), together with the opinion polling institute forsa, examined how coronavirus reporting impacted the credibility of journalism. According to Prof. Michael Steinbrecher, head of the long-term study “Journalism and Democracy”, the results are “alarming”: 41 percent of the population believes that the credibility of journalism has decreased as a result of the coronavirus reporting, with only eight percent stating that credibility has increased.



November | German-Austrian Digital Media Observatory

## Combating disinformation



In the “German-Austrian Digital Media Observatory” (GADMO), scientists and fact-checkers in German-speaking countries are joining forces. The partners, including news agencies and the Correctiv network, want to make fact checks more accessible to the public and scientifically examine disinformation campaigns. GADMO is coordinated by Prof. Chris-

tina Elmer and Stephan Mündges from the Institute for Journalism (IJ). Prof. Henrik Müller from the IJ and Professors Carsten Jentsch and Jörg Rahnenführer from the Statistics Faculty are also involved. GADMO will be integrated into the Europe-wide network “European Digital Media Observatory” (graphic).

November | Migration reporting

## UNESCO handbook published in Arabic



The Erich Brost Institute for International Journalism and the Jordan Media Institute join forces with UNESCO and the UNHCR to publish the Arabic version of the “UNESCO Handbook for Journalism Educators: Reporting on Migrants and Refugees” in Jordan. The book presentation is sponsored by Jordanian Princess Rym Ali (fifth from left). The UN High Commis-

sioner for Refugees, Filippo Grandi, sends a greeting. The handbook is based on six years of scientific work by the Dortmund research team and its editors Prof. Susanne Fengler (fourth from left), Monika Lengauer (third from left) and Anna-Carina Zappe. The book will also be published in French, Spanish and Swahili.

March | Media and migration

## E-learning platform for journalists presented

Alongside Mediendienst Integration, the Erich Brost Institute for International Journalism developed an e-learning platform on the topics of migration, media and discrimination. Media professionals, prospective journalists and other interested parties – for example, from foundations and administrations – can continue their education there with over 20 free courses. The platform is presented by the Minister for Migration, Refugees and Integration.

December | MERCUR funding

## UA Ruhr network researches sustainability narratives

The Mercator Research Center Ruhr is funding the “Narrative Economics Alliance Ruhr” (NEAR) with 460,000 euros. NEAR bundles competencies from economic theory, business journalism, finance and statistics/econometrics within the UA Ruhr. The network is set to strengthen research in the field of “Narrative Economics” and will focus on sustainability narratives. From TU Dortmund University, Prof. Carsten Jentsch from the Department of Statistics and Prof. Henrik Müller from the Institute for Journalism are involved.

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October | Expert meeting

## Inequalities in long-term care

Prof. Martina Brandt from the Department of Social Sciences concludes her three-year international research project "IN-CARE – Inequality in Long-Term Care" with an expert meeting that is held at the University Open Days in the Dortmunder U. In collaboration with her team and colleagues from Keio University Tokyo, King's College London and Vrije Universiteit Amsterdam, she examined how different care systems are related to inequalities in family care and well-being.



July | Seminar week

## Delegation visits from the University of Mosul



A delegation from the cooperation university in Mosul visits TU Dortmund University for a seminar week on the topic "Science for Society – Science to Business: European Approaches to Knowledge Transfer". This is organized as part of the "RESI – Renew Education and Science in Iraq" project, funded by the German Academic Exchange Service, in which TU Dortmund

University and the Universities of Graz and Mosul are collaborating. Thirteen members of the University of Mosul, including members from the fields of architecture, information technology and economics, meet for a workshop on the topic "From PhD to Innovator" in the Center for Entrepreneurship & Transfer.

August | EU funding

## Research projects on social innovation



The Social Research Center (sfs), a scientific institution of the Department of Social Sciences, has been successful with four project applications in the European Union's "Horizon Europe" funding program. In all projects, sfs works together with international partners and contributes its expertise in the field of social innovation. The total funding allocated to TU Dort-

mund University is 900,000 euros over a period of up to four years. The content is about human-machine interfaces in steel production, collaborative robots and artificial intelligence in SMEs, an inclusive and sustainable Industry 5.0 and a new ecosystem of social innovation that connects four countries.

15 September | Democracy day

## How democratization can succeed worldwide

According to the Economist Index, democracy is on the decline: In 2020, 49.4 percent of the world population lived in a democracy, in 2021 it was only 45.7 percent. On Democracy Day, Prof. Christoph Schuck from the Institute for Political Science and Philosophy explains what conditions are needed for democratization. It is beneficial if the desire for democracy comes from society itself and if reforms are flanked by economic and social successes. Veto players must also support the path of reform.



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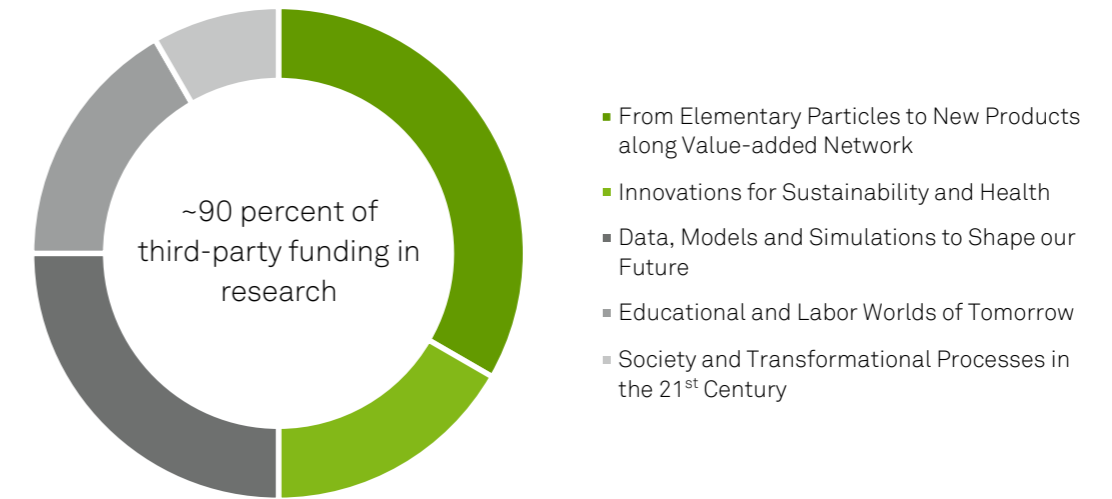


**Outstanding Research**

TU Dortmund University is a university strong in research. In total, there are more than 900 third-party funded projects.

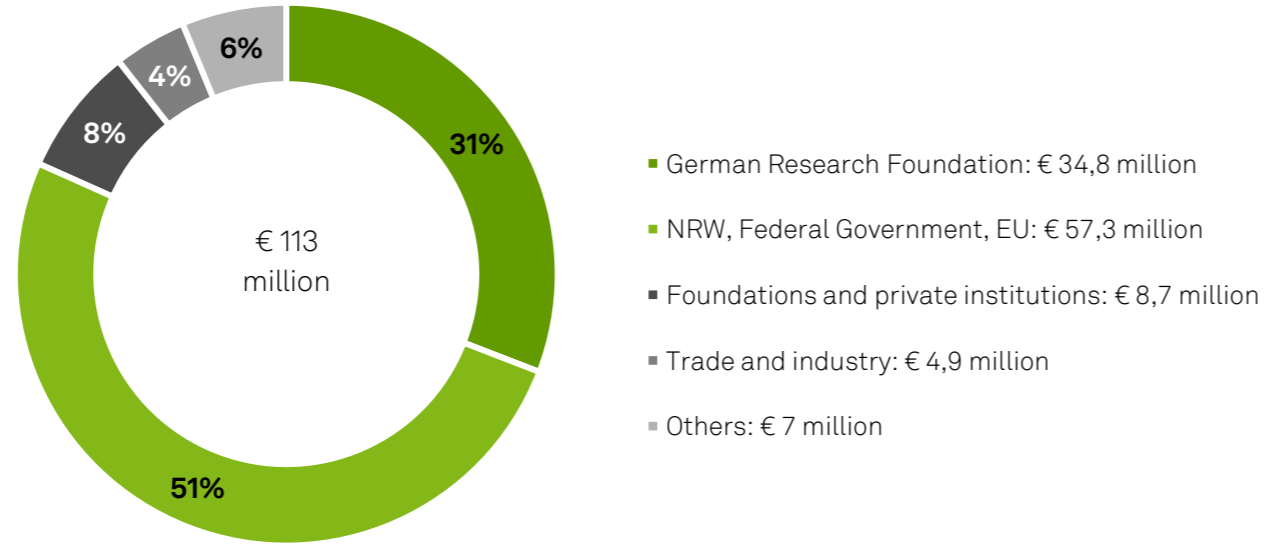
**Five Strong Profile Areas**

TU Dortmund University's five scientific Profile Areas represent outstanding research fields. The competitive acquisition of third-party funding and prestigious international publications attest to their strength. These research priorities account for about 90 percent of funding.



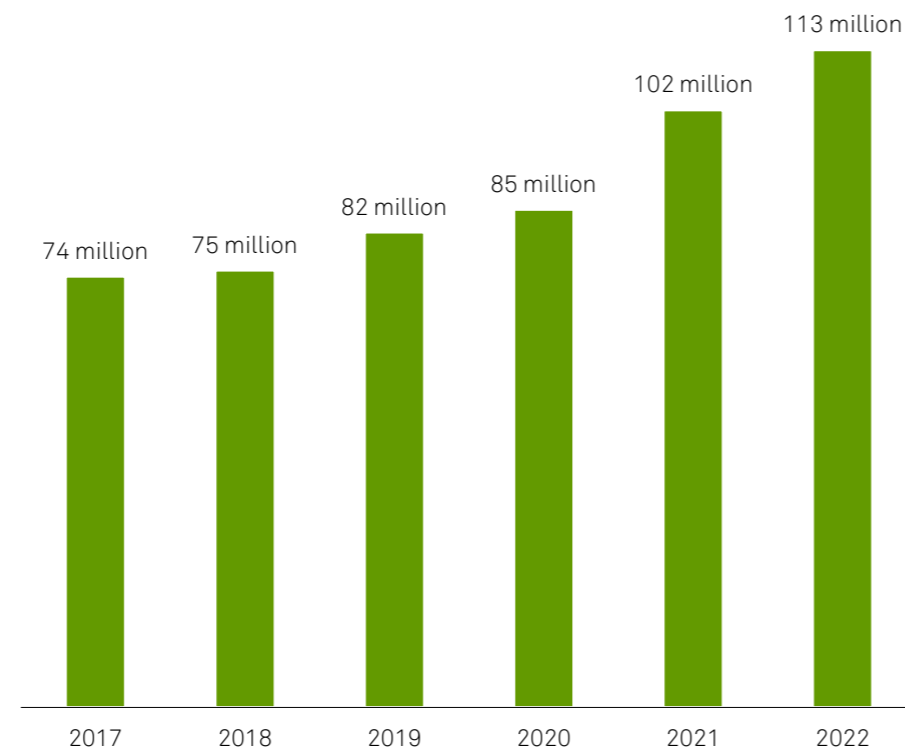
<b>1</b>	<p><b>From Elementary Particles to New Products along Value-added Networks</b></p> <p>The Profile Area brings together research on matter at different scales – from elementary particles to finished materials. Outstanding research activities by scientists at TU Dortmund University are dedicated to the study of matter in its various properties and different states of aggregation, using customized technologies and methods. Likewise, researchers in materials science and production engineering are driving innovations in the processing, shaping and future-oriented production of materials.</p>
<b>2</b>	<p><b>Innovations for Sustainability and Health</b></p> <p>Scientists at TU Dortmund University find solutions for sustainability and health in outstanding third-party funded and large collaborative projects. Interdisciplinary research supports the seminal topic of health through the development of active substances and drug delivery forms, radiotherapeutic innovations and advances in medical technology. New technologies in the natural sciences and engineering, energy management research and solutions for resource-conserving, emission-reduced construction methods provide groundbreaking innovations for a sustainable future.</p>
<b>3</b>	<p><b>Data, Models and Simulations to Shape our Future</b></p> <p>Researchers at TU Dortmund University are shaping our data-based future. Their outstanding research activities are characterized by the vision of not only developing and using digital technologies and data-driven research, but also driving them forward in a demand-oriented, safe and ethically responsible manner. In flagship projects, the course is set for the future use of machine learning and artificial intelligence in interaction with modern simulation techniques. The efficient and sustainable use of digital data in different sciences and groundbreaking technologies is what motivates researchers in interdisciplinary collaborative projects.</p>
<b>4</b>	<p><b>Educational and Labor Worlds of Tomorrow</b></p> <p>Investigating, shaping and further developing the educational and labor worlds of tomorrow is the focus of various high-profile research projects at TU Dortmund University. Our scientists cover the entire spectrum in their research – from studies on learning ability and cognitive development, to surveys on teaching and learning situations, or to interdisciplinary observations of changing work context.</p>
<b>5</b>	<p><b>Society and Transformational Processes in the 21<sup>st</sup> Century</b></p> <p>Researchers at TU Dortmund University provide well-founded analyses and innovative solutions for the social and societal challenges of the 21st century in outstanding third-party funded projects. Research priorities range from fundamental questions about the structure, cohesion and transformation of societies to the conditions of social coexistence: Solidarity, age, sustainability and urbanity are just a few of the seminal topics to which scientists at TU Dortmund University devote their research.</p>

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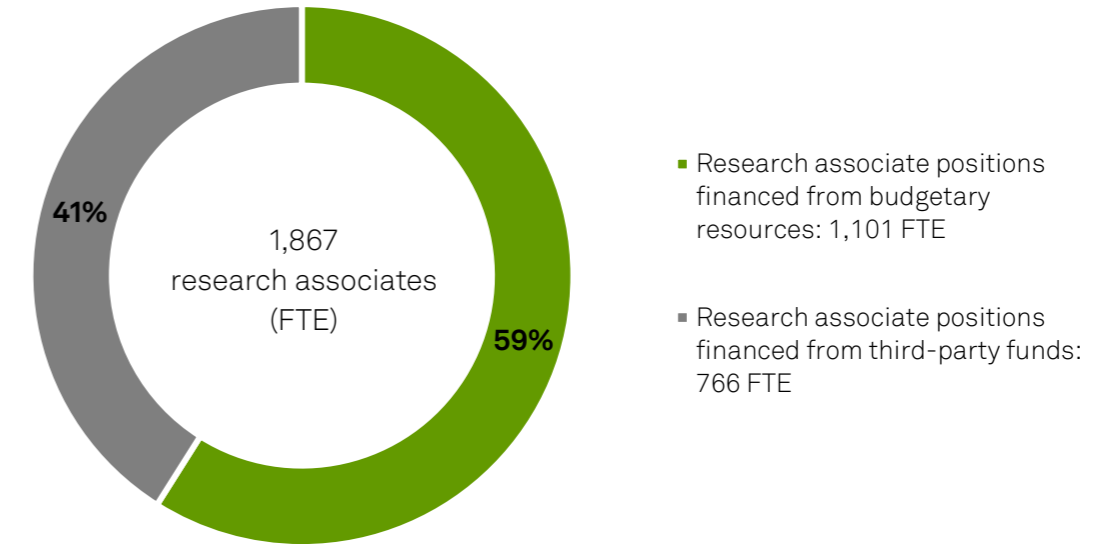
### Third-Party Funds for Research

In 2022, TU Dortmund University secured third-party funds of around EUR 113 million, of which over 80% is public money.



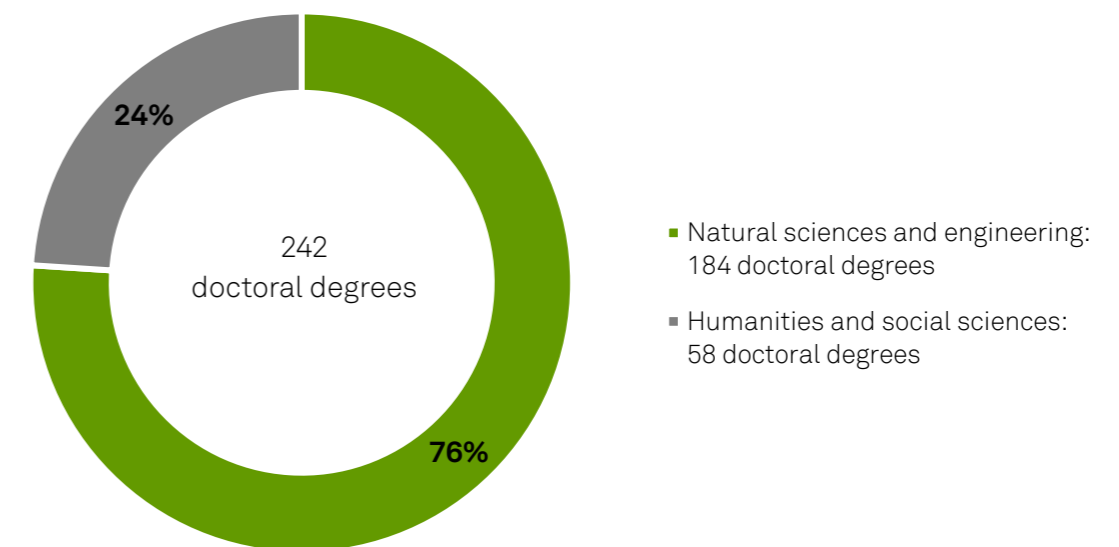
### Growing Third-Party Revenues

TU Dortmund University's third-party revenues have continuously increased in the past years.



### Hundreds of Jobs from Third-Party Funds

Around 40% of all research associate positions at TU Dortmund University are financed from third-party funds. This shows that the acquisition of third-party funds not only facilitates excellent research but also creates jobs in the region. (FTE = Full-Time Equivalent)



### Early Career Researchers

Many scientists undertake a doctoral degree at TU Dortmund University. In the 2022 calendar year, 242 people completed their doctoral degrees, of which 70 women and 172 men.



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# STUDIES AND TEACHING

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January | Career service

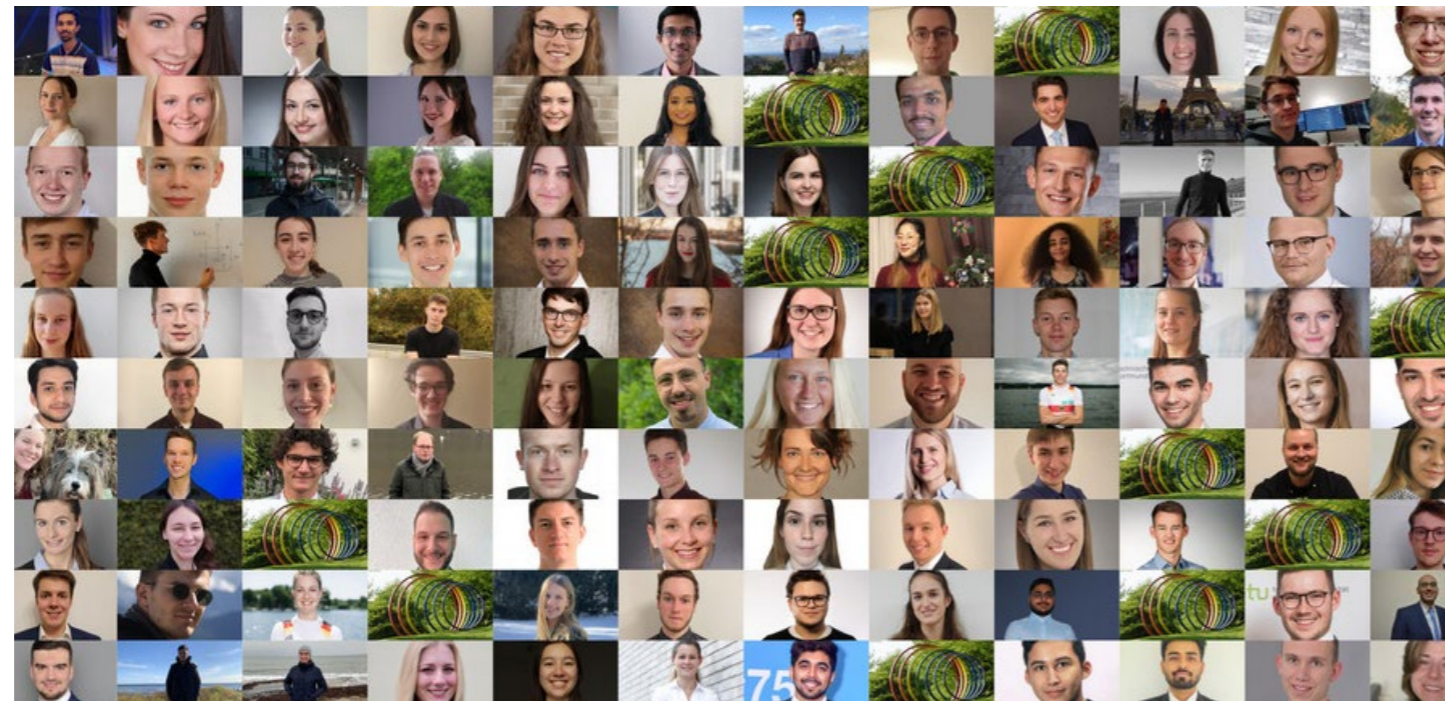
## stellenwerk supports young professionals

For a year now, the stellenwerk career service at TU Dortmund University has served as a point of contact for questions about career orientation and career planning. For example, it teaches students and graduates how to properly submit applications and how to gain practical experience during their studies. There are also services for doctoral candidates and international students. The career service is based in the Center for Entrepreneurship & Transfer, and stellenwerk itself is a joint project of various universities.



January | Deutschlandstipendium

## Scholarship holders meet their sponsors virtually



In 2022, the Deutschlandstipendium scholarship ceremony also takes place online. 253 scholarship holders received their sponsorship certificates in advance by post and get to know their sponsors in virtual chat rooms during the event. At the ceremony, the Soroptimist sponsorship award is granted to Alicia Gayda from the Department of Computer Science and the Martin

Schmeisser Medal to Jasmin Bedow from the Department of Physics for outstanding academic achievements. For the 2021/22 funding year, TU Dortmund University was able to gain seven new sponsors compared to the previous year. Of the 300 euros that scholarship holders receive per month, private sponsors and the federal government each provide 150 euros.

April | Start of semester

## Finally back on campus



After four semesters of the pandemic, which mostly had to take place online, the 2022 summer semester starts again with in-person teaching. At the beginning of the lecture period, the university welcomes its students on campus with a number of campaigns under the slogan "Welcome Back". President Prof. Manfred Bayer (right) and two other members of the Rector-

ate hand out TU pens and chocolates on the Mensa bridge. In addition, the university, in collaboration with Studierendenwerk Dortmund, organizes a raffle, with a photo shoot on the roof of the Math Tower being one of the prizes. Protective measures against COVID-19, such as the obligation to wear masks for classes, are kept in place for the time being.

December | Campus portal

## Milestone reached in the "Campus Management" project

The processes of student administration are transferred to the new campus portal for two weeks in December. They are then updated and new functions are added. With this, a new stage has been reached in the campus management project on the way to converting to the sustainable, integrated IT system HIS-inOne. It will gradually replace the previous software products used by TU Dortmund University to organize studies and teaching.

March | System accreditation

## Senate adopts "Mission Statement Good Teaching"

Over the course of broad, six-month participation process, TU members have agreed on what makes a successful course of study and what good teaching means. The basic principles were laid down in the new "Mission Statement Good Teaching", which the Senate unanimously approves in March. The mission statement is also an important building block for the forthcoming system accreditation. The aim is for the university to be able to award the Accreditation Council's seal to its courses itself in the future.

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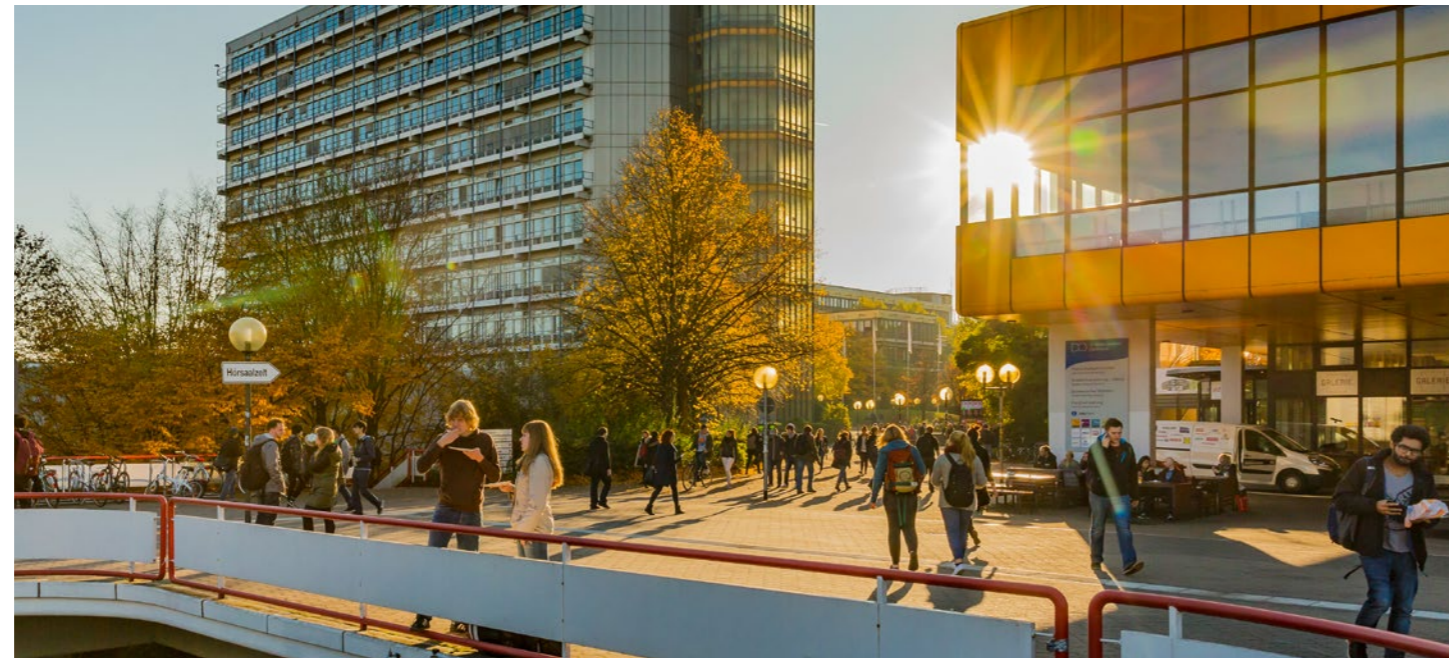
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1 December | Enrollment numbers

## Slight increase in new students



In the winter semester 2022/23, 5,032 people begin their studies at TU Dortmund University – 1.4 percent more than in the previous year. As of 1 December, the university has a total of 32,476 students, maintaining the same level as the previous year (plus 0.1 percent). This upward trend can also be seen among international students, with 5,200 students coming from

abroad this winter semester. This means that 16 percent of TU students are international. The proportion of female students has also increased: With 14,977 people, they make up 46.1 percent of all students at TU Dortmund University (previous year: 45.8 percent). 22.2 percent of students are enrolled in teacher training courses.

April | Information events

## Information about study opportunities in teacher training

The three universities in the University Alliance Ruhr – TU Dortmund University, University of Duisburg-Essen and Ruhr-Universität Bochum – organize a joint promotion week on teacher training. At information events, interactive lectures, workshops and campus tours, prospective students receive all the important answers to questions about study opportunities and financing. In addition to online events, university-specific events are also offered on campus.

February | Guide for universities

## Handbook “Strengthening Scholarship Culture” presented

A new handbook is presented as part of the joint university project “Stipendienkultur Ruhr”: “Strengthening Scholarship Culture” explains how scholarships can be integrated into everyday university life and which factors are crucial to a successful scholarship culture. The reason behind this is that the scholarship rate in the Ruhr area is very low compared to the entire country. This is partly due to the large proportion of first-time academics.

13 October | Kick-off

## TU Dortmund University kicks off the new academic year in a stadium

On 13 October, TU Dortmund University traditionally starts the new academic year at SIGNAL IDUNA PARK. The event in the Borussia Dortmund stadium welcomes the first-year students to the university and the city. This year, the event celebrates its 20<sup>th</sup> anniversary, as it was first held in the soccer stadium in 2002.

“I wish you every success in your studies. Tailor your studies to your skills and interests and also attend lectures from other departments to broaden your horizons,” says President Prof. Manfred Bayer in his opening remarks. He assures the new students that, despite the pandemic and the energy crisis, everything will be done to keep the university up and running in the winter semester.

The new academic year is ushered in inside the BVB stadium together with the city, the theater, the General Student Committee (AStA), the Studierend-enwerk and the BVB. Christoph Edeler, Head of University Sports, moderates the program. The event is accompanied by music from the Dortmund Philharmonic Orchestra, the university choir and Mandla Mndebele from the Dortmund Opera, who emphasizes the solidarity and encouraging message of the event with the piece “You’ll never walk alone”. Johannes Zedel from the Studierendenwerk, managing director of BVB Thomas Tress, the Deans of the Departments and the AStA, represented by David Wiegmann and Leonie Lippert, also welcome the students. Mayor Thomas Westphal joins in via video.



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January | Get online week

Student project wins Digital Day Audience Award



The “Get Online Week 2022” by ten students and Dr. Bastian Pelka from the Department of Rehabilitation Sciences wins the 2021 German Digital Day Audience Award. The project’s free courses teach digital skills and are primarily aimed at people with disabilities, who often benefit less from digital media.

May | Study conditions

Two programs at the top of CHE ranking

In the university ranking of the Centre for Higher Education (CHE), TU Dortmund University received excellent ratings in terms of student satisfaction: the bachelor’s degree programs in chemical engineering and electrical engineering and information technology are the only ones of their kind in Germany to be top class in three or four of the most important categories. According to the survey, students in both programs are particularly satisfied with the general study conditions as well as the courses offered and the support at the beginning of their studies.

April | Bachelor project seminar

Students support Dortmund Zoo in market research



For a bachelor’s project, the professorship for marketing cooperates with Dortmund Zoo and the Association of Friends of Zoo Dortmund. As part of the seminar, the budding business economists conduct market research for the zoo, for example by designing zoo-specific event concepts and surveying visitor satisfaction.

August | Teaching prize for Dirk von Kölln

Grand piano from 1908 redesigned



17 architecture students reassemble an almost 115-year-old grand piano from Ibach in their own design. The instrument is disassembled in the model workshop, then all playable elements such as the keyboard and pedals are used for the new piano. The students consider a new design for the exterior of the instrument and a stool that goes with it. A

jury selects the final design to be implemented. The winner is Rebecka Suchert, who designed the grand piano and stool with twisted legs. Dirk von Kölln (left), head of the model construction workshop, receives the TU Dortmund University teaching prize for leading the project at the Academic Anniversary Celebration.

June | Formula student

Racing team presents first electric car

After a two-year production phase, the student racing team unveils its latest vehicle to the public. For the first time, this vehicle is an electric racing car: With the FS221, the GET Racing team can take part in the international Formula Student competition designed for electric vehicles. In the TU Dortmund University team, 80 students build a new single-seater racing car almost every year in order to compete with other international racing teams at various Formula Student events.



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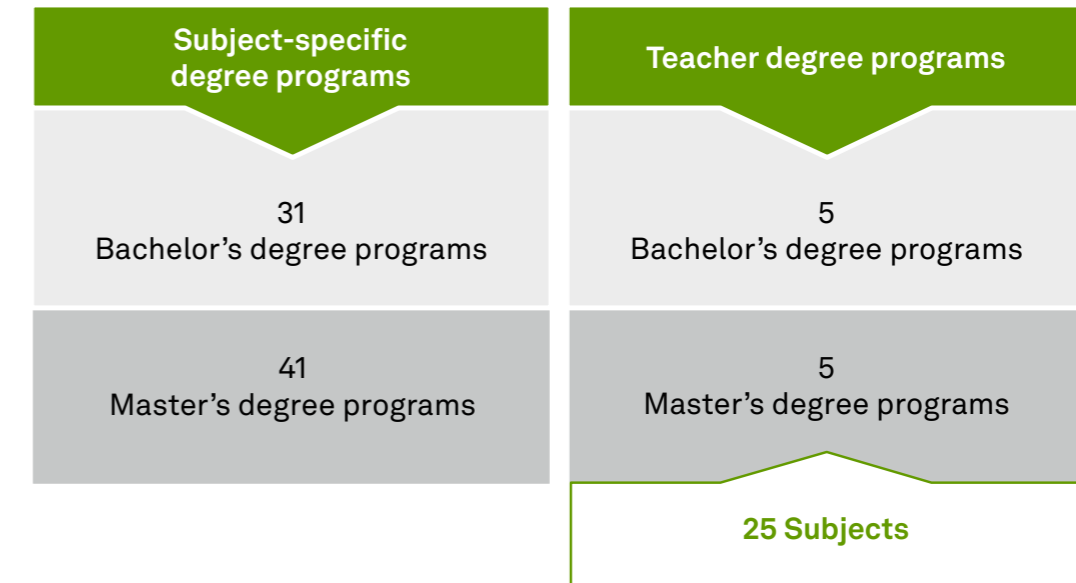
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### The Degree Programs

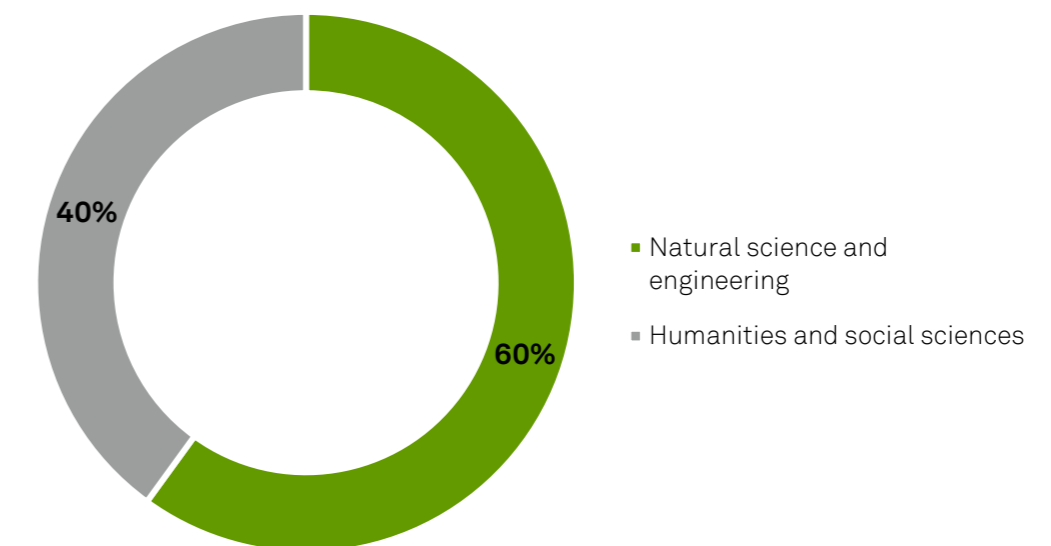
Subject-specific degree programs	Bachelor's degree	Master's degree
Advanced Methods in Particle Physics		EN
Ageing Societies		DE
Applied Computer Science	DE	DE
Applied Literary and Cultural Studies	DE & EN	DE & EN
Applied Linguistics	DE & EN	DE & EN
Architecture and Urban Design	DE	DE
Automation and Robotics		EN
Civil Engineering	DE	DE
Biochemical Engineering	DE	DE
Chemistry	DE	DE/EN
Chemical Engineering	DE	DE
Chemical Biology	DE	DE/EN
Data Science	DE	EN
Econometrics		EN
Economics and Journalism		DE
Electrical Engineering and Information Technology	DE	DE
Empirical Multilingualism		DE
Educational Sciences	DE	DE
Real Estate and Construction Management		DE
Computer Science	DE	DE
Information and Communication Engineering	DE	
Journalism	DE	DE
Cultural Analysis and Cultural Intermediation		DE
Logistics	DE	DE
Manufacturing Technology		EN
Mechanical Engineering	DE	DE
Mathematics	DE	DE
Medical Physics	DE	DE
Music Journalism	DE	DE
Philosophy and Political Science		DE
Physics	DE	DE
Process Systems Engineering		EN
Spatial Planning	DE	DE/EN
Rehabilitation Pedagogy	DE	
Rehabilitation Sciences		DE
Religion, Ethics and Politics		EN
Sociology	DE	
SPRING – Spatial Planning for Regions in Growing Economies		EN
Statistics	DE	DE
Technomathematics	DE	DE
Industrial Engineering	DE	DE
Business Mathematics	DE	DE
Economic Policy Journalism	DE	
Business Administration and Economics	DE	DE
Science Journalism	DE	DE
<b>Total</b>	<b>31</b>	<b>41</b>
<b>Teacher training</b>		
Elementary schools	DE	DE
German Secondary Schools ( <i>Haupt-, Real und Gesamtschulen</i> )	DE	DE
Grammar Schools ( <i>Gymnasien</i> ) and Comprehensive Schools ( <i>Gesamtschulen</i> )	DE	DE
Vocational Schools	DE	DE
Special Education	DE	DE
<b>Total</b>	<b>5</b>	<b>5</b>

DE = in German, EN = in English



### Broad Choice of Degree Programs

There are around 80 degree programs at TU Dortmund University. Bachelor's and Master's degree programs are offered for all five types of schools in the teaching degree program, where in total, there are around 25 different subjects to choose from. In addition, there are six subjects in the area of special educational needs.



### Wide Spectrum of Subjects: More than Just Technology

Around 60 percent of students are enrolled on natural science and engineering degree programs, around 40 percent on degree programs in the humanities and social sciences. A fifth of them are studying for a teaching degree.

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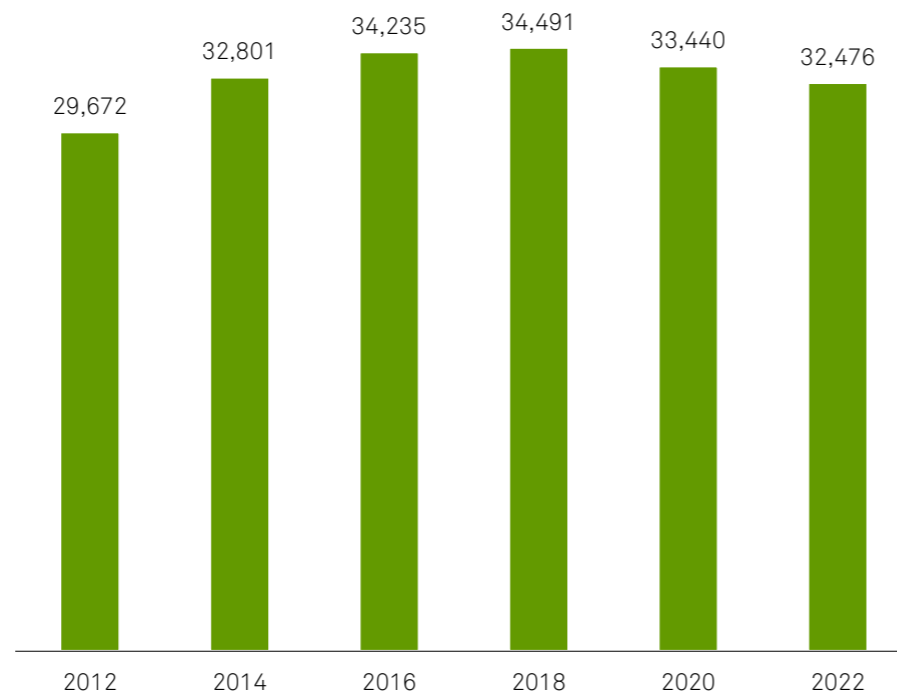
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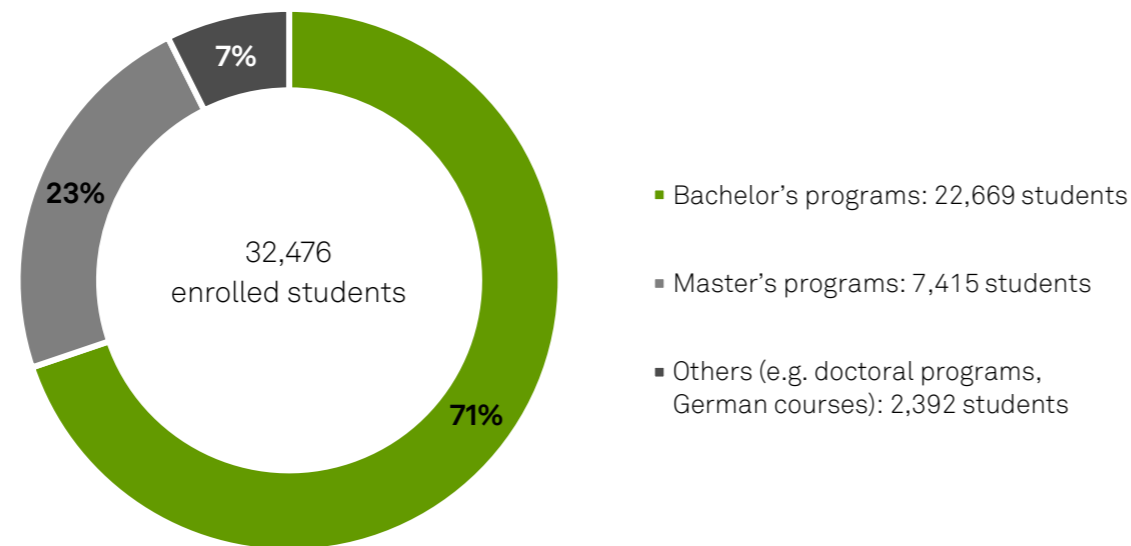
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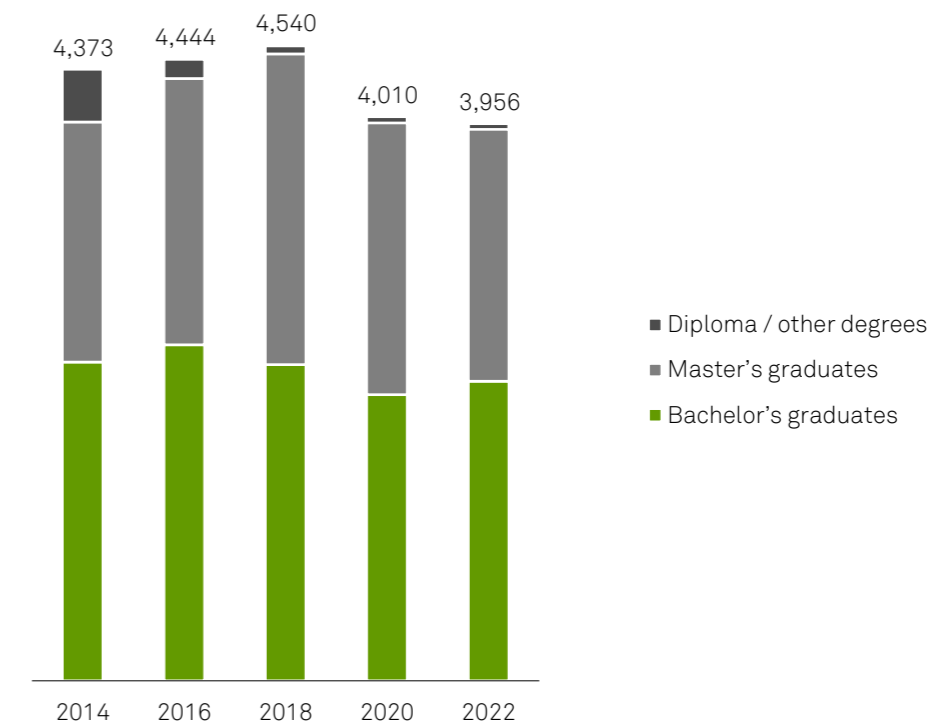
### Student Numbers at a High Level

TU Dortmund University has got more than 32,400 students in the 2022/23 winter semester, including about 5,000 new enrolments. The number of students has risen continuously for many years and meanwhile stabilized at a high level.



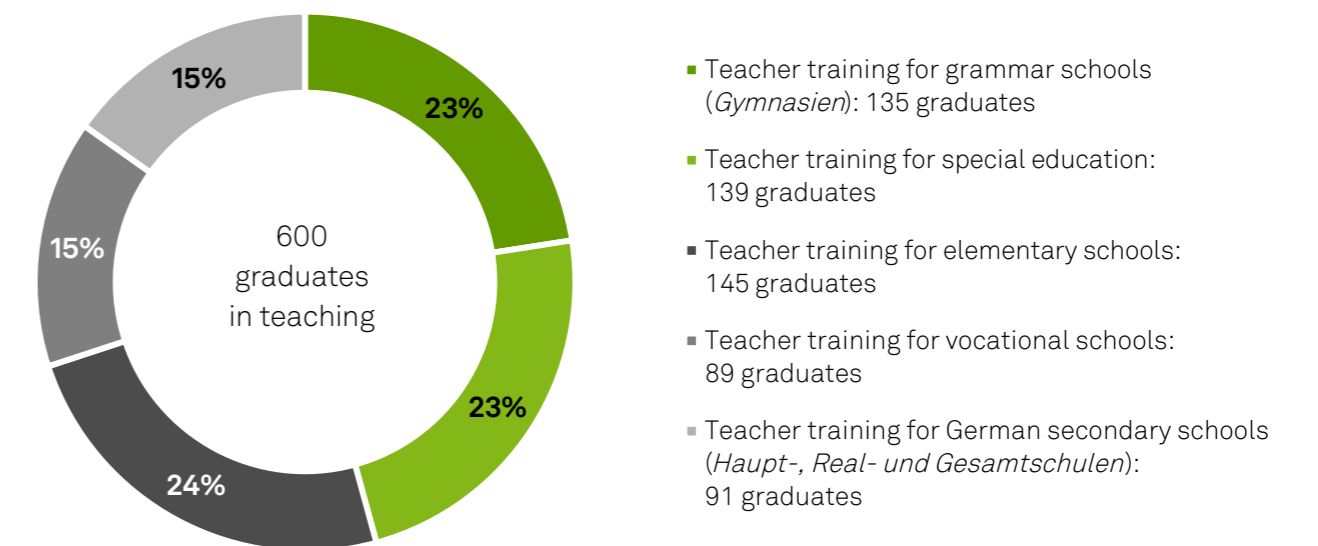
### Bachelor-Master: Studies in Two Stages

In 2022, over two thirds of all students at TU Dortmund University are enrolled in Bachelor's programs and one fifth in Master's programs. The remaining seven percent are enrolled as doctoral candidates or taking German courses.



### Training of Highly Qualified Professionals

In the 2022 exam year, a total of around 4,000 students graduated from TU Dortmund University, including some 2,100 Bachelor's and about 1,800 Master's graduates.



### Teachers for All Five Types of School

In the 2022 exam year, around 600 students at TU Dortmund University completed their Master's degree in teaching. The university trains teachers for all five types of school and thus helps alleviate the shortage of teachers in Germany.

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August | beVinuS.NRW

## Universities are developing a virtual semester



TU Dortmund University, the University of Wuppertal and RWTH Aachen University want to make it easier for students to refresh the necessary school-level knowledge independently. In a joint project, they are developing a reference process for an “accompanying virtual zero semester at universities in NRW (beVinuS.NRW)”, which is intended to increase student

success and prevent dropouts. A program of digitally supported self-learning phases is designed to enable students to process school-level knowledge as soon as it is required for their studies. The NRW Ministry for Culture and Science (MKW) is funding the project for three years with around 3.5 million euros. Other universities are also set to benefit from the results.

February | OERContent.nrw

## E-learning for dynamics, statistics and geotechnics

MKW State Secretary Dr. Dirk Günnewig (second from right) personally hands over the funding certificates: Four projects at TU Dortmund University are funded by OERContent.nrw with around 900,000 euros. The teaching concepts focus on good scientific practice, adaptive learning in the field of dynamics, basic knowledge in statistics or geological field work in virtual space. The NRW Ministry for Culture and Science (MKW) supports digital formats with OERContent.nrw. The developed e-learning offerings are made available to all universities.



May | Freiraum 2022

## 1.6 million euros for seven digital teaching projects

The Innovation in University Teaching Foundation (Stiftung Innovation in der Hochschullehre) funds seven projects at TU Dortmund University as part of “Freiraum 2022”: five solo applications and two joint applications. In the call for applications with no thematic restrictions, teachers can use this funding to develop new ideas. Almost all projects at TU Dortmund University are in a digital teaching context. The joint project “Immersive Building Worlds”, in which TU Dortmund University is the consortium leader, will be funded for two years, the other projects for one year.

October | digiFellows

## 50,000 euros for digital escape room

The winning project of the “digiFellows” program, which TU Dortmund University tendered university-wide together with the NRW Ministry of Science and the Digital University NRW, is announced: Dr. Vanessa Henke and Dr. Stephanie Spanu from the Department of Educational Sciences and Psychology and Dr. Lena Tacke from the Department of Human Sciences and Theology develop a digital escape room where student teachers can exchange views on sustainability goals.

October | Innovative learning and teaching opportunities

## Hybrid Learning Center established



The MakerSpace opens in the Central Library, where students can use 3D printers, laser cutters, a video and audio studio and a virtual reality area. The MakerSpace is part of the Hybrid Learning Center (HyLeC), which is funded with 3.3 million euros by the Innovation in University Teaching Foundation. Operated jointly by the University Library, Engineering Education,

and the Chairs of Computer Graphics, and Physical and Motor Development in Rehabilitation and Education, the HyLeC offers physical and virtual resources, rooms and advisory services – all from a single source. All services are designed to be barrier-free, with many workshops being carried out in hybrid form.

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9 May | Europe Day  
 **Math Tower shines in blue light**

For Europe Day, the Math Tower shines in blue light and the campus is decorated with flags. For 35 years, TU Dortmund University has been participating in the Erasmus+ program, which enables students and employees to spend time abroad. This exchange is possible with the 26 other EU member states and six program countries outside the EU. In total, TU Dortmund University works with 237 universities. The top destinations for students for a semester or two abroad are Sweden, Spain, Portugal and Great Britain.



November | Particle physics  
 **Two grants for a master's degree**



In the Erasmus Mundus program, the “International Master of Advanced Methods in Particle Physics” (IMAPP) program receives 4.5 million euros in EU funding. The Department of Physics offers the English-language master’s program with a focus on particle physics in cooperation with the University of Bologna and the University of Clermont Auvergne.

Over half of the funding is distributed to the best international students in the form of scholarships. The Franco-German University included the program in its sponsorship back in May. Since then, Dortmund students have received a monthly grant of up to 300 euros during their time abroad.

March | Architecture  
 **10<sup>th</sup> International Spring Academy**


City entrances – like the area surrounding the Schmettkerbrücke bridge in Dortmund – shape people’s first impression of a city. Around 20 architecture students from TU Dortmund University, the TU Eindhoven, FH Potsdam and the University of Naples Federico II have ten days at the 10<sup>th</sup> International Spring Academy of TU Dortmund University to develop fresh ideas for city entrances in Dortmund, Eindhoven and Naples. They present their plans in the NRW Architecture Archive. The cities then receive an overview of the results.



15 June | Erasmus+  
 **Insights into other academic cultures**



On 15 June, Erasmus+ celebrates its 35<sup>th</sup> anniversary. At TU Dortmund University, many students from the Department of Cultural Studies take part in the program and gain insights into a different academic culture: A semester abroad is mandatory in two bachelor’s degree programs, says Erasmus coordinator Miriam Brockmeyer.

February | Digital event  
 **International conference on social justice**



Master’s students host an international online conference on social justice at the Institute for Diversity Studies. The event focuses on social justice in foreign language teaching and teacher training. The more than 200 participants come from more than 15 countries.



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October | Data science student  
**María García Flores awarded the DAAD prize**



María Ángeles García Flores receives the DAAD prize from TU Dortmund University. Every year, the German Academic Exchange Service (DAAD) awards the prize for outstanding achievements by foreign students at German universities. The 24-year-old Spaniard studies data science and is committed to intercultural exchange between students.

November | Internationalization  
**Guide for English language teaching**



Five English-language master's programs have been created at TU Dortmund University since 2020 alone, and English-language teaching is set to be expanded further. A new guide supports lecturers and departments with the implementation of English-language teaching and shows creative scope and support options.

27 October | Specialists  
**11<sup>th</sup> International Career Fair**



For the eleventh time, companies based in Dortmund and the surrounding region use the International Career Fair to showcase themselves as potential employers to TU students from over 30 countries. A total of 25 companies are represented at the fair. The demand has never been so high: 285 international students registered, with a total of 222 interviews taking

place. The applicants come from a wide variety of countries, including India, Iran, Syria, Nepal, Mauritius and the USA. Most of the participants are enrolled in one of the eleven English-language master's programs at TU Dortmund University. Almost every sixth of the approximately 32,500 TU students comes from abroad.

May–July | International Summer Program  
**Guest students from partner universities**

17 students from the United States, China and the United Kingdom are taking part in the 19<sup>th</sup> International Summer Program (ISP) in the second half of the 2022 summer semester. During the semester break at their home universities, they collect credit points in English-language courses alongside fellow students from Dortmund. All the participants will also be taking a German course and a cultural studies class that introduces them to the culture and politics in Germany. On top of that, they can also take part in a research project.

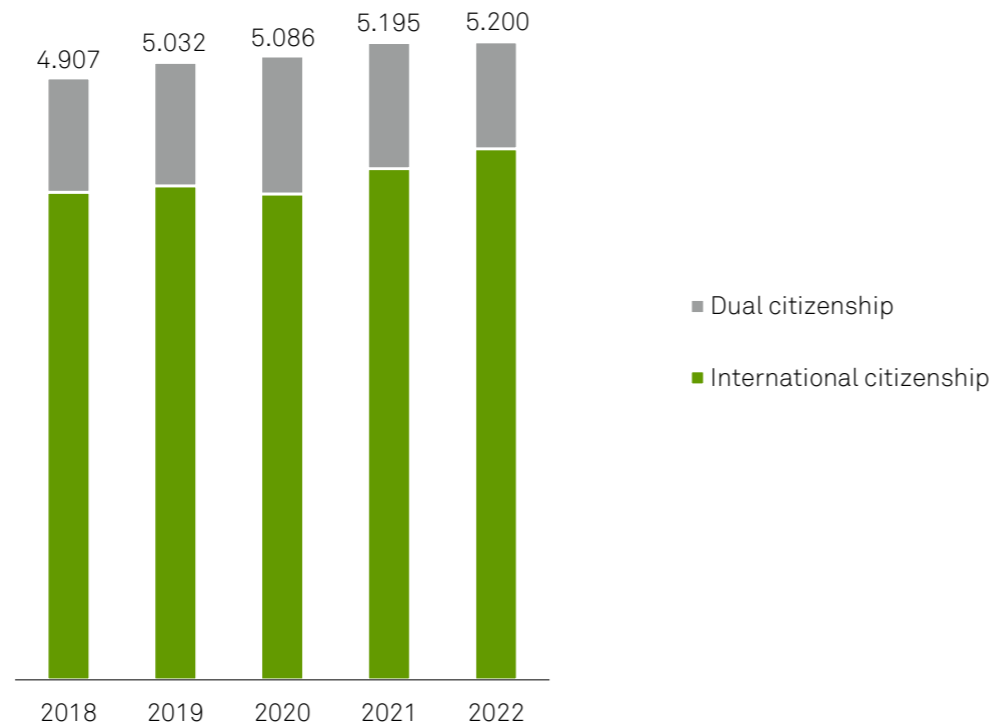


Winter semester | MAREPOL  
**New English-language master's program**

The master's program "Religion, Ethics and Politics" (MAREPOL) examines the relationship between religion, politics and society from theological, philosophical and political perspectives. The program has been offered in English since the winter semester 2022/23: With this, the Department of Human Sciences and Theology is responding to the fact that international research is increasingly focusing on the topic. At the same time, it is one more step in the department's internationalization strategy.

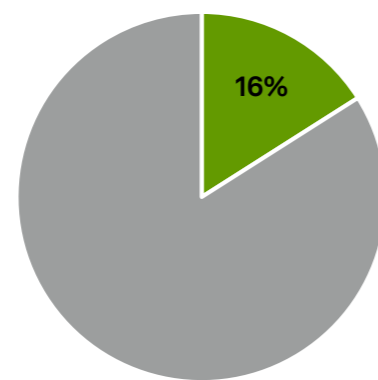


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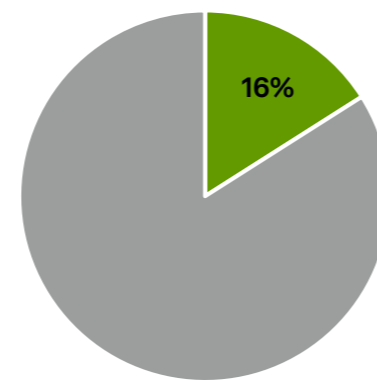


### Attractive Place to Study for International Students

TU Dortmund University is popular among international students. Around 5,000 students who hold an international citizenship or a dual citizenship are studying at TU Dortmund University.



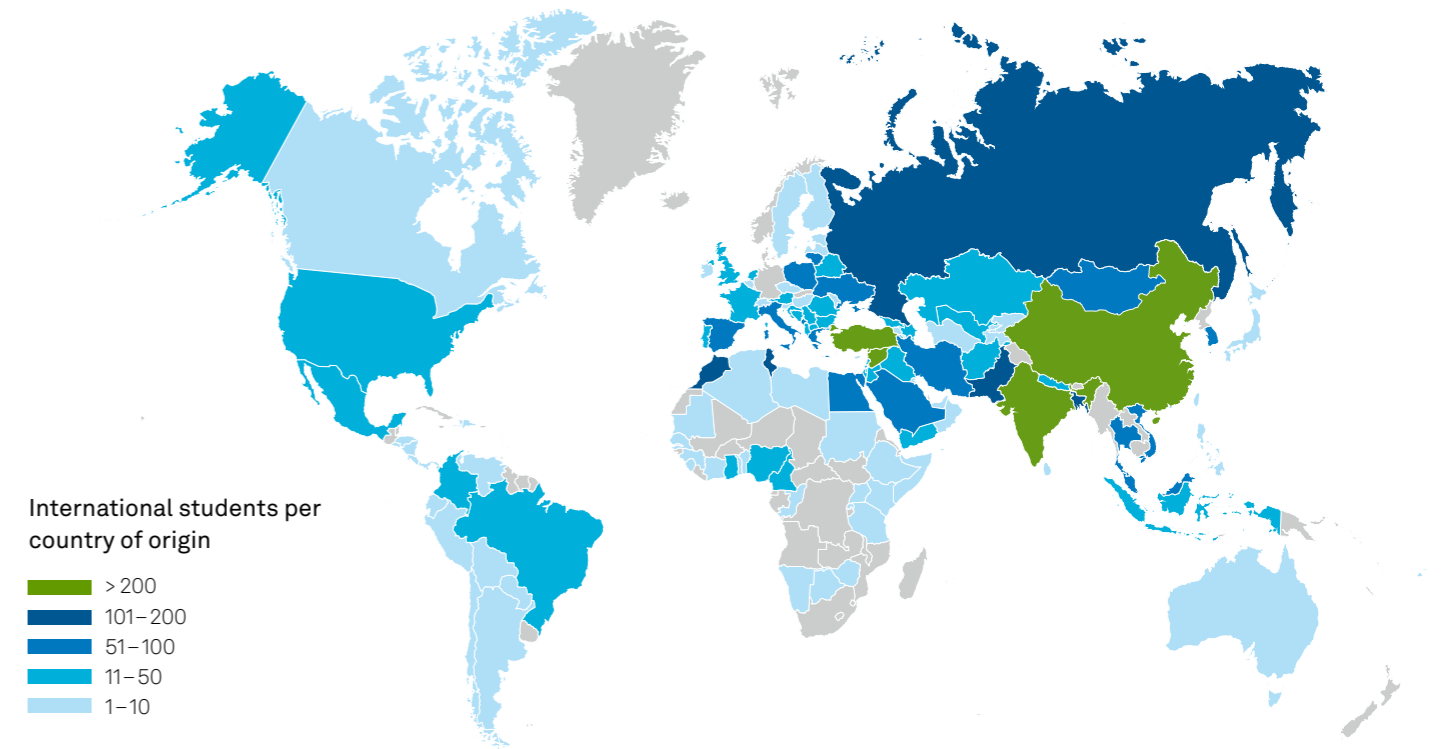
International students



International doctoral candidates

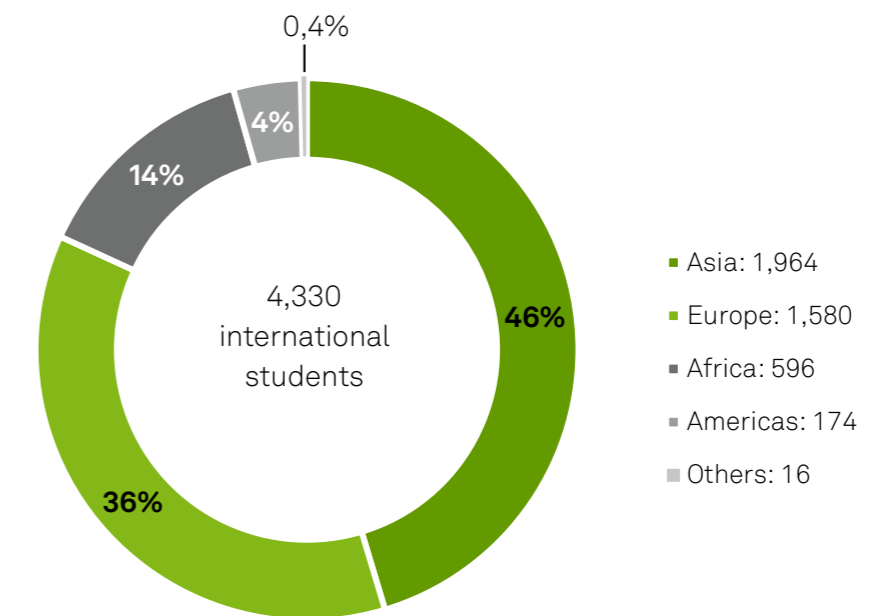
### Students and Doctoral Candidates Come to Dortmund

Of the students at TU Dortmund University, 16 percent hold an international passport. Among early career researchers, the share of people who hold an international passport is 16 percent as well.



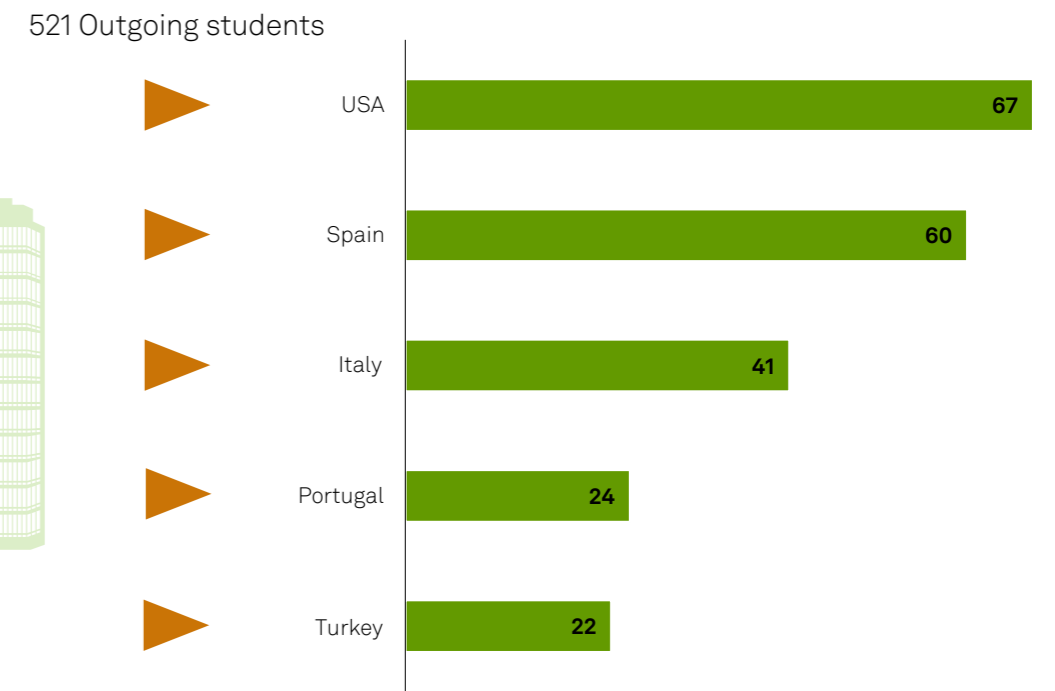
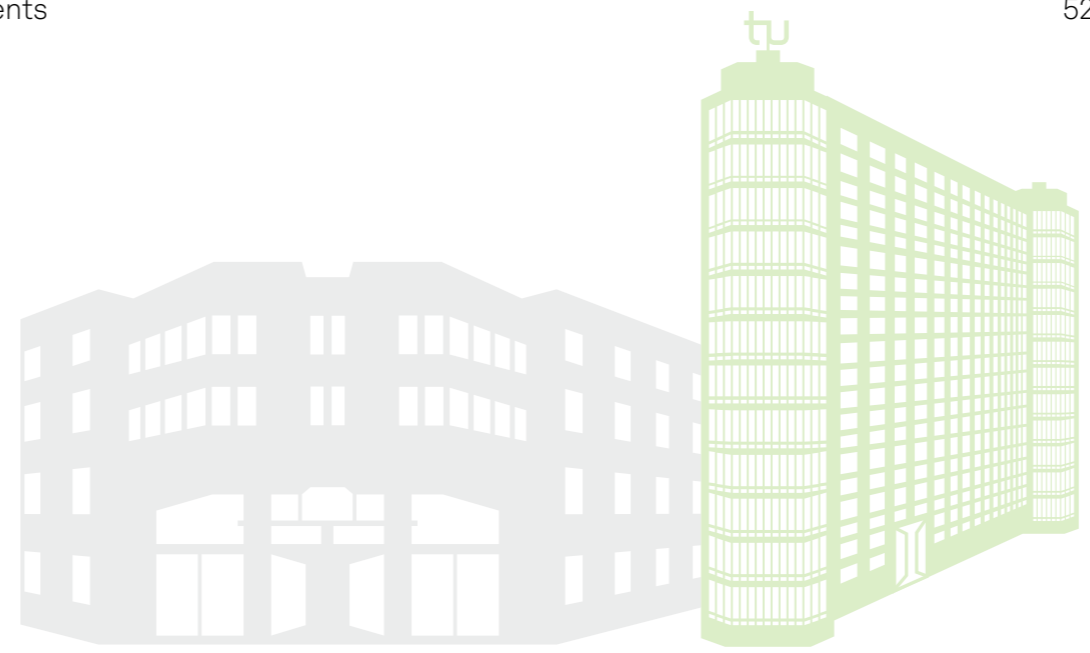
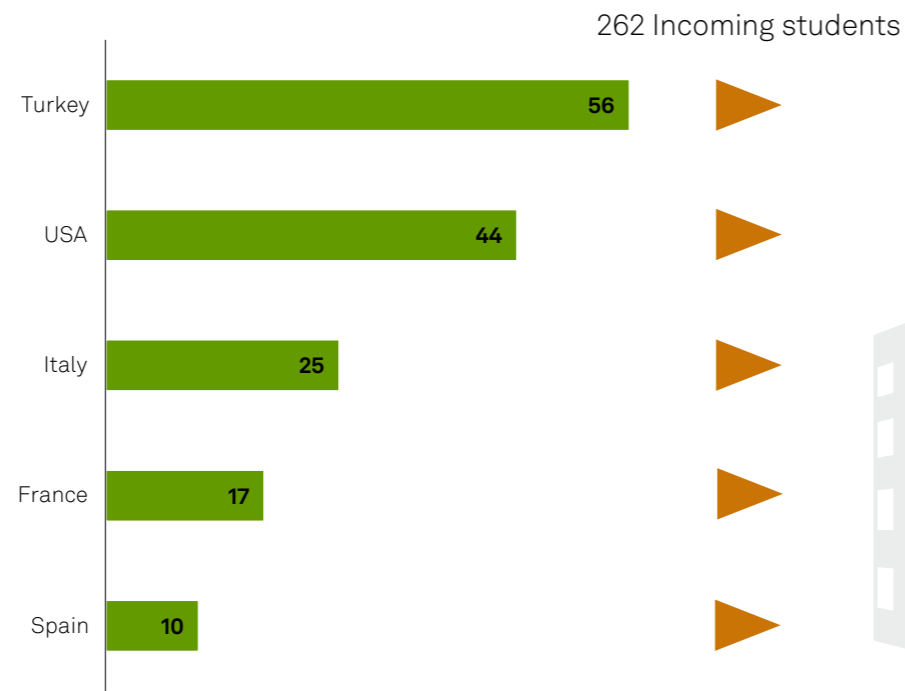
### Students from All Continents

The students at TU Dortmund University come from around 120 different countries. Of those who acquired their university entrance qualification abroad, most come from India, followed by China and Syria. Among the international students who acquired their university entrance qualification in Germany, around 35 percent hold a Turkish passport.



Just under half of all students who do not hold German citizenship come from Asia. Europe is also strongly represented. From Australia and Oceania, on the other hand, there are only five.

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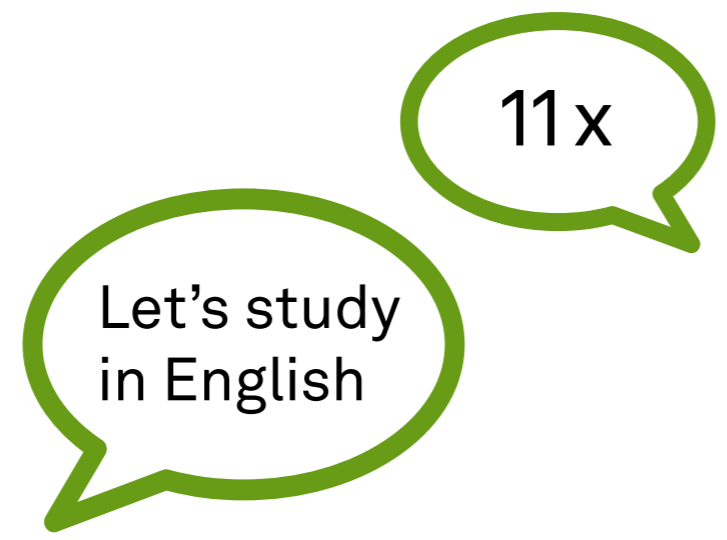


### Incoming Students Come to Dortmund for an Exchange Semester

In the 2021/22 academic year, around 260 students came from abroad to TU Dortmund University for an exchange semester, an international internship or a short-term program. The majority of these students came from Turkey and the USA.

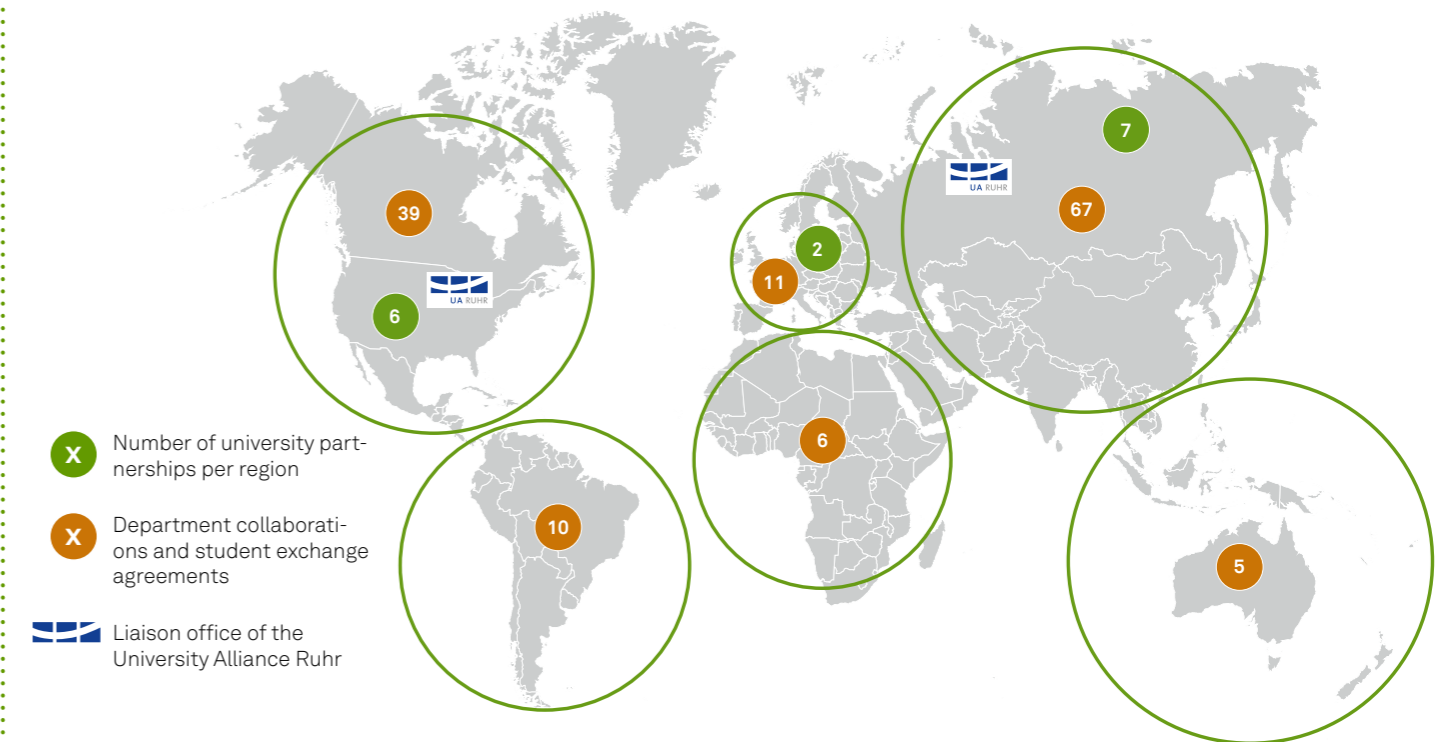
### Outgoing Students go Abroad for an Exchange Semester

More than 500 students from TU Dortmund University were able to gain international experience in the 2021/22 academic year during an exchange semester, an international internship or a short-term program. The three most popular destinations were the USA, Spain and Italy.



### Studying in English

As of winter semester 2022/23, there are eleven English-language Master's degree programs at TU Dortmund University. The university's goal is to further expand the range of programs on offer.



### University Partnerships throughout the World

TU Dortmund University has concluded around 380 cooperation agreements with universities worldwide, including 15 partnerships at university level, around 140 department collaborations and student exchange programs as well as around 240 ERASMUS university partnerships. In addition, students may stay at 260 universities in the ISEP network. The liaison offices of the University Alliance are present on two continents.

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September–October | Lecture series

## Freshmen get tips for starting their studies

Aside from eagerly awaiting their studies, first-year students often have many questions. The Central Student Advisory Service answers these shortly before the start of lectures in the winter semester in the “Starting on the Right Track” series. In a total of eight lectures, three of which take place digitally and five on campus, the freshmen receive numerous tips for the transition period from school to university. The series focuses not only on professional support, but also on learning strategies and time and self-management.



February and July | Success stories

## Talent scouting increases educational equity

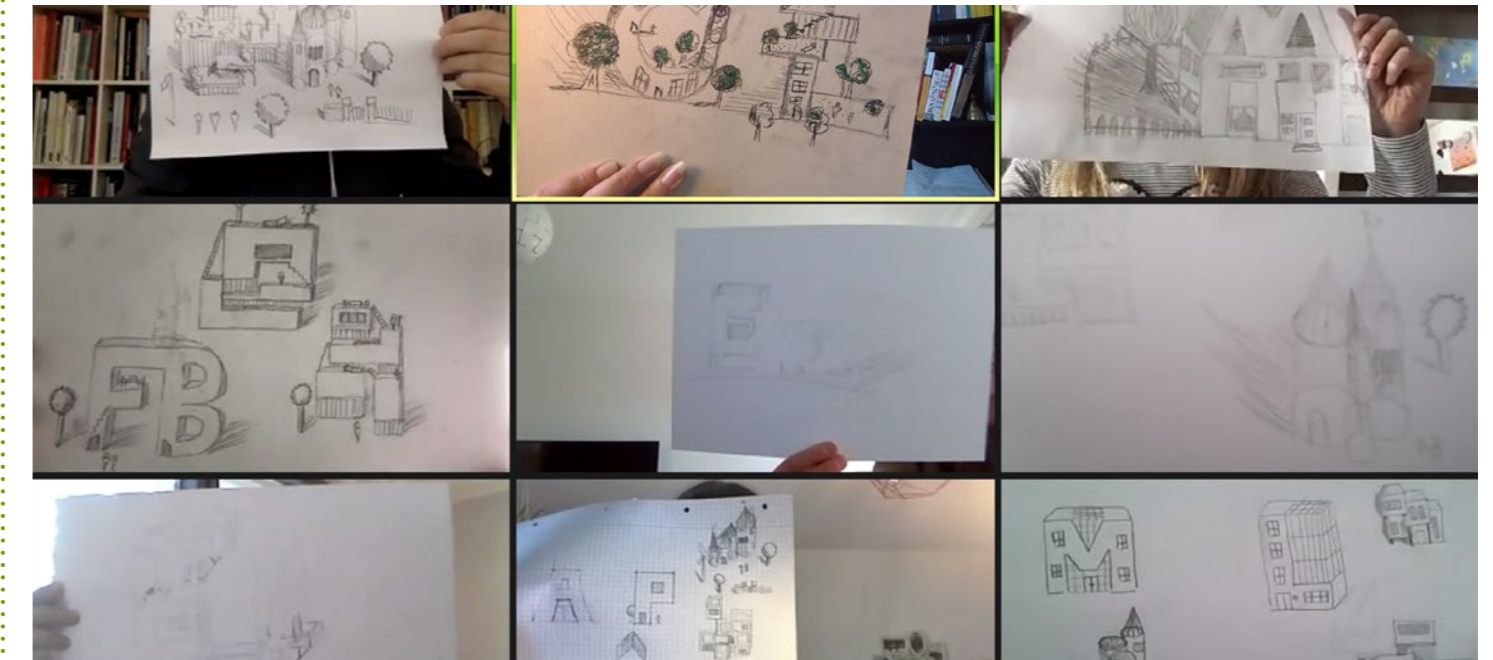


Talent scouting is implemented at 17 locations in North Rhine-Westphalia, and the state supports the program with 6.4 million euros per year. In February, a study confirms the success of this approach: Educational equity in university access has improved by up to 70 percent. The talent scouts at TU Dortmund University also accompany talented students on their

way to and during their studies. “These talents often come from an environment that cannot always support them in their choice of study or career,” explains project coordinator Christian Stauer. In July, schoolchildren, prospective students and existing students, who are accompanied by talent scouts, come together at TU Dortmund University (photo).

28 April | Virtual campaign day

## Girls Day and Boys Day at TU Dortmund University



Girls Day and Boys Day take place in parallel throughout Germany. TU Dortmund University is also participating with digital events. Girls and boys can get to learn about degree programs that have traditionally been dominated by the opposite sex: Departments with a STEM focus (science, technology, engineering and mathematics) provide services for girls aged from

10 to 16. Boys from the same age group can get to know areas with a focus on social and cultural sciences. The program consists of guided tours, live experiments, workshops, and more. The Department of Architecture and Civil Engineering held a dream house workshop last year (photo).

August | Student orientation

## Giving studies a try with SchnupperUni

How can statistics heal people? How does the brain process visual impressions? These and other questions are answered during the SchnupperUni: Over one week in August, the departments open their lecture halls and laboratories to interested students from grade 10 and up. After two years of the pandemic, they can now try out studies again in person and take part in over 60 events – from lectures to workshops to laboratory tours – and thus get to know day-to-day university life.

Winter semester | Individual support

## SchülerUni welcomes its 2,500<sup>th</sup> participant

Attending lectures, writing coursework and taking exams: In the 2022/23 winter semester, there are more than 70 high-performing and motivated schoolchildren attending courses at TU Dortmund University in addition to their school lessons. The youngest participants are still in middle school, including Sarah Jussenhoven from Lüdenscheid: The ninth-grader is the 2,500<sup>th</sup> person to take part in SchülerUni. She then goes on to attend a lecture on psychology.

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# UNIVERSITY ALLIANCE RUHR



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February | International cutting-edge research

## 75 million euros for establishing the Research Alliance Ruhr

In the NRW State Chancellery, the presidents of TU Dortmund University, Ruhr-Universität Bochum and the University of Duisburg-Essen sign the extended cooperation agreement to establish the Research Alliance Ruhr. The three universities set up four new research centers and a college under the umbrella of the UA Ruhr. The centers bundle their research on “One Health”, “Chemical Sciences and Sustainability”, “Trustworthy Data Science and Security” and “Future Energy Materials and Systems”. The “College for Social Sciences and Humanities” will invite visiting scholars from abroad.

The Research Alliance is set to be fully developed by 2025. The aim is to establish a top-class international research alliance. Prime Minister Hendrik Wüst (second from left) and Science Minister Isabel

Pfeiffer-Poensgen (second from right, Minister until June 2022) also hand over the allocation notice for 75 million euros for the development phase at the meeting. “North Rhine-Westphalia is the densest university and science location in Europe, our science is exceptional,” says Wüst. “The innovations created here are the opportunities of tomorrow. With the Research Alliance Ruhr, we are giving the science location of NRW another powerful boost on the way to top-class international research. This is how we use the turbo for UA Ruhr.”

The Research Alliance was initiated as part of the Ruhr Conference. Up to 50 new professorships and numerous positions for mid-level research are set to be created.



August | First international appointment

## Research Alliance welcomes Humboldt Professor

Prof. Edvardas Narevicius is the first international professor appointed by the University Alliance Ruhr for its Research Alliance. With his research on ultra-cold reactions, the Israeli researcher belongs to the Research Center “Chemical Sciences and Sustainability”. A Humboldt professorship was established for Prof. Narevicius at the Department of Physics of TU Dortmund University. With funding of up to five million euros for five years, the Humboldt Professorship is Germany’s most highly endowed international research award.



November | Artificial intelligence

## Prof. Daniel Neider fills the first professorship at the RC Trust



Prof. Daniel Neider takes over the professorship “Verification and Formal Guarantees of Machine Learning”. His professorship is the first to be filled at the Research Center Trustworthy Data Science and Security (RC Trust) and is based at the Department of Computer Science. Neider researches the reliability of artificial intelligence (AI), previously based in Oldenburg.

December | Funding commitment

## Another 48 million euros for Research Alliance



NRW Science Minister Ina Brandes (center) secures the Research Alliance with an additional funding commitment. On the TU campus, she presents the university management of the three UA Ruhr universities – including TU President Prof. Manfred Bayer (left) and TU Chancellor Albrecht Ehlers (right) – with the allocation notice for 48 million euros.

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November | Consultation with municipal council

## Prospects for the Ruhr area as a knowledge region

The municipal council in the Ruhr Regional Association exchanges views with the UA Ruhr for the first time on future issues in the region. At the invitation of the chairperson, the presidents of the University of Duisburg-Essen, Prof. Barbara Albert (fourth from left), Ruhr-Universität Bochum, Prof. Martin Paul (fifth from left), and TU Dortmund University, Prof. Manfred Bayer (third from left), take part in the deliberations of the eleven mayors and four district administrators. 17 institutions of higher education, five universities and over 50 non-university institutes make the Ruhr area an important knowledge region.



2021/22 | Joint research

## MERCUR supports nine cooperative projects



With a total of around four million euros, the Mercator Research Center (MERCUR) is financing nine new cooperative research projects within the UA Ruhr, involving researchers from TU Dortmund University. The projects are approved in December 2021, in July and November. The researchers use the MERCUR funding to build up long-term research networks within

the UA Ruhr. At least half of the funding comes from the Mercator Foundation, while the universities are financing the other part. Twelve scientists from seven TU Dortmund University departments are involved. In the UA Ruhr, there are now over 200 collaborations being conducted in research, teaching and administration.

November | Anniversary

## Joint Cluster of Excellence RESOLV celebrates tenth anniversary

Numerous international scientists researching the role of solvents come to the Ruhr area in early November to celebrate the tenth anniversary of the Cluster of Excellence “RESOLV – Ruhr explores solvation” at the Zollverein coal mine. Founded in 2012, around 200 members are currently researching in the joint project, which is supported by Ruhr-Universität Bochum and TU Dortmund University. Ten scientists from three TU Dortmund University departments are currently involved.

After a successful initial funding phase, the network was able to start the extension in 2019 and received a further 50 million euros from the German Research Foundation. After the ZEMOS research building ZEMOS was acquired by spokeswoman Prof. Martina Havenith-Newen at the Bochum location, Prof. Ga-

briele Sadowski successfully acquired a second research building with CALEDO at the Dortmund location in 2020. The “Center for Advanced Liquid-Phase Engineering Dortmund” is built on Otto-Hahn-Strasse on the north campus.

In the past ten years, the RESOLV Cluster of Excellence has succeeded in establishing solvation research as a research field of its own. The field is also ennobled internationally by the Nobel Prize in Chemistry for Prof. Benjamin List, member of RESOLV and Director at the Max Planck Institute for Coal Research in Mülheim an der Ruhr. His lecture is one of the highlights of this celebratory event.



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June | International young scientists

## Research explorers investigate the Ruhr area

As part of the “Research Explorer Ruhr” program, the UA Ruhr invites 17 young scientists from all over the world, five of whom visit TU Dortmund University. For two weeks, they can get to know the university and the Ruhr area as a research and living location. They attend the Summer Festival together with Maria Verena Peters (left) from Research Support Services. Every year, the three UA Ruhr universities welcome international postdoctoral researchers and doctoral students so that they can plan new projects and longer stays.



June | Fellowship program

## Welcoming new Ruhr Fellows



After a two-year break, the UA Ruhr can start welcoming students from top American universities again as part of the Ruhr Fellowship program. This enables the participants to get to know the Ruhr area from an academic, economic and cultural perspective. At the start, they are welcomed by Prof. Tessa Flatten (right), Vice President International Affairs. The pro-

gram, which has been organized alternately by the three UA Ruhr universities since 2012, takes place for the fourth time under the leadership of TU Dortmund University. The aim is to present the Ruhr area to future specialists as a region with a high quality of life and strengthen international networking.

February | Successful project

## Permanent support for young talent



TU Dortmund University, Ruhr-Universität Bochum and the University of Duisburg-Essen continue their cooperation in the Research Academy Ruhr. The Presidents of the three universities sign a corresponding cooperation agreement. In the future, the work will be coordinated by a joint office. The graduate institutions of the universities are responsible for designing the

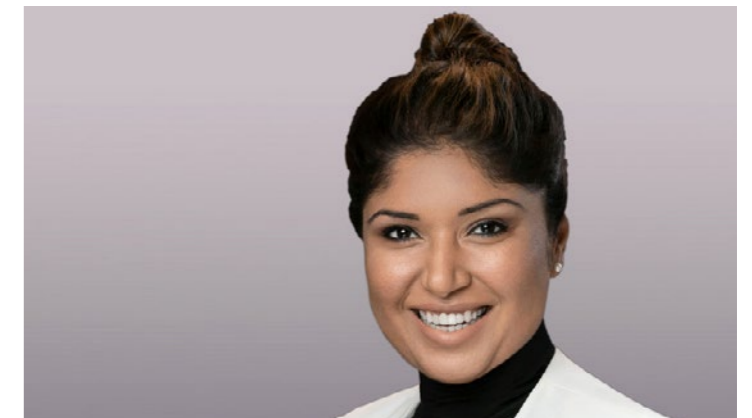
program. With the founding of the Research Academy Ruhr in 2017, a project that is unique in Germany was launched in which the three universities bundle their offerings in an interdisciplinary qualification and networking program in order to offer scientists targeted career support.



February | Liaison office under new management

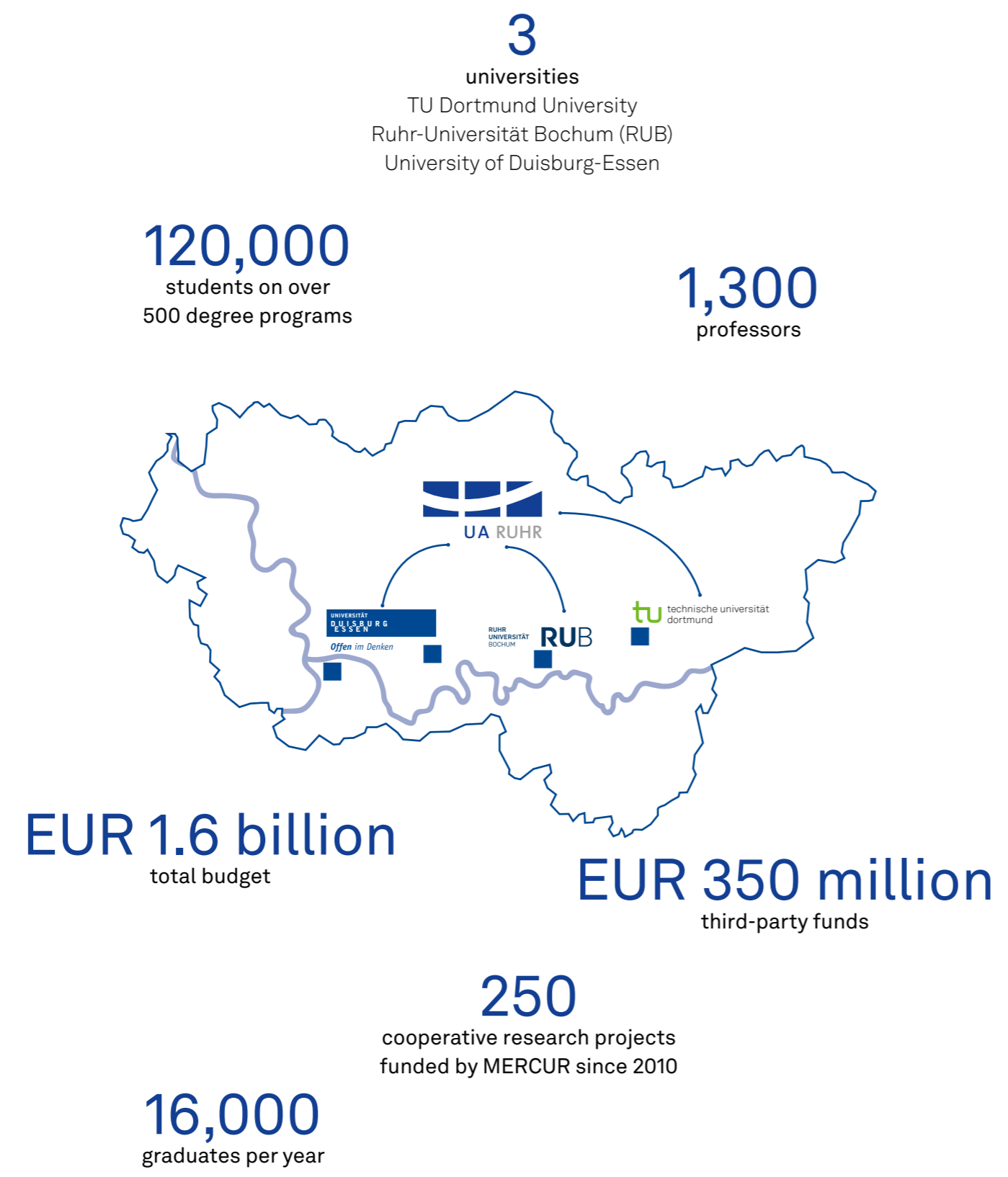
## For a strong connection with North America

For six months now, Priya S. Nayar has been driving forward international exchange as the new head of the UA Ruhr liaison office in New York. The job of the liaison offices – the UA Ruhr operates another one for the Eastern Europe/Central Asia region – is to expand research contacts and provide organizational support for joint study and learning projects. Nayar has lived in New York for around 22 years, where she has been working at the section of German-American higher education for over a decade, and previously for Hochschule Fresenius.





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**Better Together – University Alliance Ruhr**  
 TU Dortmund University has been working closely and strategically with Ruhr-Universität Bochum (RUB) and the University of Duisburg-Essen within the University Alliance Ruhr (UA Ruhr) since 2007 – true to the motto “better together”.

**Research Alliance Ruhr**

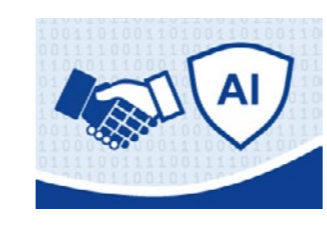
The University Alliance Ruhr bundles its international, pioneering, cutting-edge research under the umbrella of the Research Alliance Ruhr in four research centers and a college. For the start-up phase, the state is providing a total of EUR 123 million until 2025.



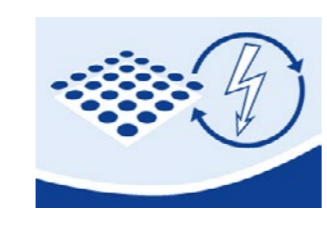
**Research Center Chemical Sciences and Sustainability**  
 The Research Center Chemical Sciences and Sustainability aims to understand chemical reactions, processes and products at the molecular level. These insights will open up technological applications in chemistry, building materials and pharmaceuticals that are innovative, environmentally friendly and economically competitive. It is essential to regard solvent molecules as active participants and not as an inert matrix in order to optimize processes in solvents such as water.



**Research Center One Health Ruhr – from Molecules to Systems**  
 The Research Center One Health – from Molecules to Systems investigates the fundamental mechanisms of health and disease, starting from the molecular level right through to higher-level systems. The ecosystem serves as a context for also considering the complex interrelationships between environmental health, animal health and human health, in keeping with the “One Health” concept. After all, humans can only stay healthy in an intact environment.



**Research Center Trustworthy Data Science and Security**  
 The Research Center Trustworthy Data Science and Security addresses the trustworthiness of intelligent systems in safety-critical applications. A unique, human-centered research approach covers the entire interdisciplinary research of trustworthy data analytics, explainable machine learning, and privacy-aware algorithms.



**Research Center Future Energy Materials and Systems**  
 The Research Center Future Energy Materials and Systems aims to develop new materials that are urgently needed for energy carrier generation, energy conversion, storage, and transport in a targeted, rapid and sustainable manner. The goal is to understand fundamental properties and relevant processes in the generation and use of complex materials in order to develop building blocks for a sustainable energy system. At the same time, the research center is looking into regenerative processes to replace energy-intensive ways of materials production and processing.



**College for Social Sciences and Humanities**  
 As an Institute for Advanced Study, the College for Social Sciences and Humanities promotes excellence in research in social sciences and humanities and advances international cooperation of the University Alliance Ruhr. The research college provides opportunities for developing and implementing innovative research projects and conceives as its mission to facilitate interdisciplinary dialogue and collaboration. The fundamental cornerstones of the college are research professorships, research groups, and an international senior fellowship program.

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May | Funding extended

## Promising interim figures for Excellence Start-up Center

A jury of experts from the state government certifies that the Excellence Startup Center at TU Dortmund University has “outstanding performance” and recommends that the current funding be continued until the end of 2024 with up to three million euros per year. From 2025, the university is committed to continuing the center sustainably with its own funds. In addition to TU Dortmund University, five other Start-up Centers in Aachen, Bochum, Cologne, Münster and Paderborn will continue to be financed.

The Center for Entrepreneurship & Transfer (CET) at TU Dortmund University was previously recognized as an Excellence Start-up Center in 2019. In the first two years, 250 teams interested in founding a company were supported here – this has already resulted in 33 corporations being founded. The focus here

is on technology-based start-ups, for example in the fields of computer science, biomedicine or construction planning. The 40-strong CET team is based in the TechnologieZentrumDortmund building in the immediate vicinity of the campus. An attractive infrastructure for start-ups has been created here on 1,800 square meters.

“Entrepreneurship and transfer unmistakably form the third pillar at TU Dortmund University, alongside research and teaching,” says TU Chancellor Albrecht Ehlers, who is also a CET board member. “Working alongside our partners, we are pursuing the vision of establishing a leading international hotspot for founders here,” adds Prof. Gerhard Schembecker, member of the Executive Board and Rectorate.



November | Pilot project

## Patent transfer to knowledge-based spin-offs

TU Dortmund University is successful with the Center for Entrepreneurship & Transfer and the subsidiary TU concept GmbH in the “IP-Transfer 3.0” initiative of the Federal Agency for Disruptive Innovation (SPRIND). As part of a pilot group consisting of 17 German universities and research institutions, TU Dortmund University will break new ground in the transfer of patents into industry over a period of three years. The common goal is to produce more knowledge-based spin-offs faster, more efficiently and legally.



February | EXIST Business Start-up Grant

## New software for pleasant room acoustics



The “kasaira” team from TU Dortmund University is funded with an EXIST Business Start-up Grant. For a year Karolina Jagiello, Sarah Kosmann and Johanna Weiland (from left to right) Time to work out your business idea and ideally launch your own start-up. The scientists are developing an innovative room acoustics planner for architects. They are supported

on their way to becoming independent by Prof. Wolfgang Willems from the Department of Architecture and Civil Engineering and the Center for Entrepreneurship & Transfer. With the EXIST grant, the federal government supports founders from universities with a monthly stipend of up to 3,000 euros plus material expenses over the course of a year.

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March | TU capital GmbH

## Seed funding for start-ups

TU Dortmund University promotes start-up projects in the local area: QuizCo, a provider of customizable learning platforms, is the first start-up to be supported with early-stage financing in 2022. The venture capital comes from TU capital GmbH & Co. KG. The university founded the subsidiary at the end of 2021 to boost technology-oriented spin-offs or start-ups local to the university. The start-ups not only receive venture capital, but are also actively supported when they enter the market.



June | Westenergie Manager Cup

## Physicists win business simulation



The traditional business simulation of the professorship of corporate accounting and controlling at TU Dortmund University takes place for the first time as the “Westenergie Manager Cup”. Under the slogan “Think like a boss!”, 360 students from TU and FH Dortmund as well as the International School of Management take part. A team from the Department of Physics at

TU Dortmund University wins the game: Prof. Andreas Hoffjan (left) and honorary professor as well as Westenergie board member Achim Schröder (right) congratulate the winners (from left to right): Arne Poggenpohl, Martin Schönfeld, Frederik Rennebaum and Maximilian Büchel. They managed to successfully make business decisions and experienced how complex markets work.

September | TU Start-up Award

## Honoring successful teams of founders



The most successful start-ups run by members and graduates of TU Dortmund University are honored with the TU Start-up Award by the Center for Entrepreneurship & Transfer. The Building Information Cloud team is delighted to receive the first place prize of 5,000 euros. The start-up developed software that enables the automated testing of planning results in

the construction industry and contributes to quality assurance as well as delivery cost and time savings. The jury for the award includes (pictured at the back from left to right): Dr. Martin Oettmeier from the Wilo Group, Prof. Tessa Flatten, Professor of Technology Management and Vice President International Affairs, and Nic Lecloux, founder of truefruits.

October | Junior Innovation Day

## Economic topics integrated into lessons

24 secondary school students from the Mallinckrodt-Gymnasium and the Europaschule from Dortmund put their creativity and entrepreneurial spirit to the test: As part of the fourth Junior Innovation Day, they develop creative business ideas and business models. They are supported by employees from the Chair of Entrepreneurship and Economic Education and the Center for Entrepreneurship & Transfer at TU Dortmund University.

December | Strengthening the third pillar

## Representatives from all departments form Transfer Advisory Board

As the third pillar alongside research and teaching, the transfer and application of scientific knowledge is one of the core tasks of TU Dortmund University. Representatives of all 17 departments are involved in the new Transfer Advisory Board, established by the Center for Entrepreneurship & Transfer in late 2022. The Advisory Board aims to initiate interdisciplinary cooperation within the university in order to strengthen the transfer and also promote cooperation with external partners.

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full-time positions at CET for transfer and career advice as well as support for start-ups



1,800 qm

of floor space for CET as the central contact point, including MakerSpace and DataSpace



### Third Mission

Transfer and support for start-ups are anchored at the university



138

supervised teams in 2022, including 9 new start-ups



180

qualification workshops in 2022 with 1,192 participants



3

transfer options with qualification offers such as the cetttec, cetup and cetucate programs



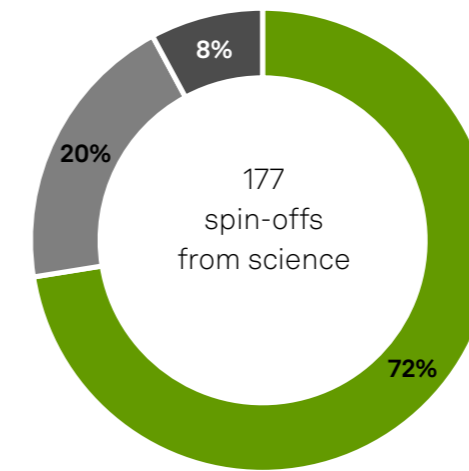
### Equity investments

are possible via the two subsidiaries TU concept GmbH and TU Capital GmbH & Co. KG



> 100

external network partners work with CET in transfer and career advice as well as support for start-ups



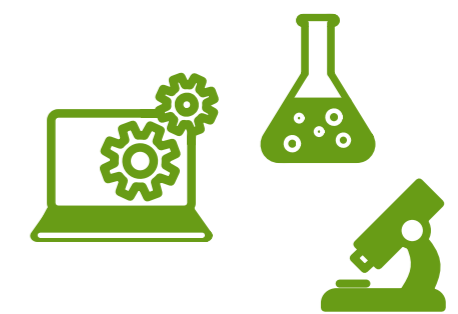
- Spin-offs founded in Dortmund
- Spin-offs founded in the region
- Spin-offs founded in other parts of Germany

### TU Dortmund University's Heart Beats for Start-Ups

TU Dortmund University promotes spin-offs from science – and does so very successfully: Since 2007, more than 170 spin-offs from TU Dortmund University have been founded, 73 percent of them in Dortmund.



> 300 companies



13,500 jobs

### Largest Technology Park as Neighbor

Germany's largest technology park is located right next to the campus and is a mark of successful technology and knowledge transfer at TU Dortmund University. Over 300 companies have settled here and created around 13,500 jobs for highly qualified employees. TechnologieZentrumDortmund (TZDO) was founded over 35 years ago and is the heart of the technology park.

### Outstanding Support for Start-Ups

The Center for Entrepreneurship & Transfer (CET) of TU Dortmund University, which has been funded since 2019 by the State of North Rhine-Westphalia as an Excellence Start-up Center, supports start-ups and aspiring entrepreneurs with various programs, workshops and equity investments.

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# CAMPUS

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1 June | Sports event

## 1,250 runners take on the traditional Campus Run

On 1 June, after a two-year COVID break, 1,250 people gather on Martin-Schmeisser-Platz to compete in the 36<sup>th</sup> Campus Run of TU Dortmund University. Around 1,000 spectators watch the individual races along the course throughout the afternoon and into the evening.

The most popular discipline, the 5-kilometer run, with around 400 registered runners, is opened by TU President Prof. Manfred Bayer. Here Lorenz Rix (18:08 minutes) and Lara Kiene (18:28 minutes) take the lead. Jonathan Dahlke (31:42 minutes) and Alexandra Lang (39:33 minutes) complete the distance of 10 kilometers the fastest – for the men this sets a new distance record, which was previously held by former TU student Hendrik Pfeiffer. Six TU members are among the eight fastest runners in the 10-kilometer race. The

fastest in the 2.5-kilometer run are Jan Bily (9:12 minutes) and Karlotta Jule Kranz (10:07 minutes). The best team in the relay race is “Tri-Geckos Dortmund”. Joel Cetra (1:09 minutes) and Maike Drewenskus (1:22 minutes) win the Math Tower Run. In the Kid’s Run, Moritz Frye and Johanna Zwinkau are the first to cross the finish line after 600 meters.

The Campus Champs are decided again this year: The challenge consists of a triathlon, combining with the Math Tower Run, a 5-kilometer run and a 10-kilometer run. Lorenz Rix and Arianna Nicole Cáceres Neira secure the award. The prize for the best group costume goes to the Statistics student representatives: Five students complete the 2.5-kilometer run dressed as a Gameboy and Tetris blocks.



22 October | Vibrant program

## Well-attended open day

A varied program of lectures, guided tours, exhibitions and hands-on activities awaits visitors on the open day. They can visit the DELTA electron storage ring, watch robots play soccer or attend a lecture from the “Between Breakfast and Borussia – modern physics for everyone”. The popular guided tour through the supply shafts is also back on the agenda. Numerous departments and the Central Student Advisory Service also provide information about studying at TU Dortmund University.



June 23 | Feeling festive

## A beautiful day for a Summer Festival



Cheerleaders fly through the air, children splash in the fountain, music is playing – there is no shortage of fun to be had at the traditional Summer Festival, which TU Dortmund University can finally celebrate again after a two-year COVID hiatus and which many institutions, department and student representatives attend. Students and employees enjoy the gorgeous

weather on campus with family and friends. Above all, the music played on two stages and numerous hands-on activities fill the guests with enthusiasm. On the Mensa Bridge, international students offer dishes from their home countries and the Studierendenwerk provides guests with 3,000 sausages and 2,000 vegan paninis free of charge.

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April | Devices from the model construction workshop

## University Library starts lending via RFID

The University Library uses new devices for lending, which make self-service much easier. The devices were built in the model construction workshop of TU Dortmund University and are part of an extensive RFID project: The radio-frequency identification booking technology is used when lending, returning and securing media. The project team presents the new devices: (from left to right) Lukas Lerche, Anja Carnevale, project manager Michael Schaarwaechter, Dirk von Kölln, Alexander Wiedemann and Joachim Kreische.



April | Pioneers in Europe

## Service robot searches for lost books



The robot "Tory" drives independently through the rows of shelves in the University Library and helps to sort the media. Using RFID signals, it finds books that are in the wrong place and therefore cannot be found. However, the robot's possible uses go far beyond just sorting: For the new library building, there are plans to set up indoor navigation based on the data gathered

from the robot. Using an augmented reality function, library users could be guided directly to their chosen medium via their smartphone, similar to a navigation system. The Dortmund University Library is the first library in Europe to use robots of this kind.

March | Digitization

## TU Dortmund University introduces digital student ID



The new digital student identification card – the "Student ID" – is available in the TU app. Students can use it to identify themselves, for example to take advantage of discounted rates in the canteens or to borrow media from the University Library. The digital Student ID replaces the old credit card-sized ID.

February | University Library

## DFG funds open-access publications

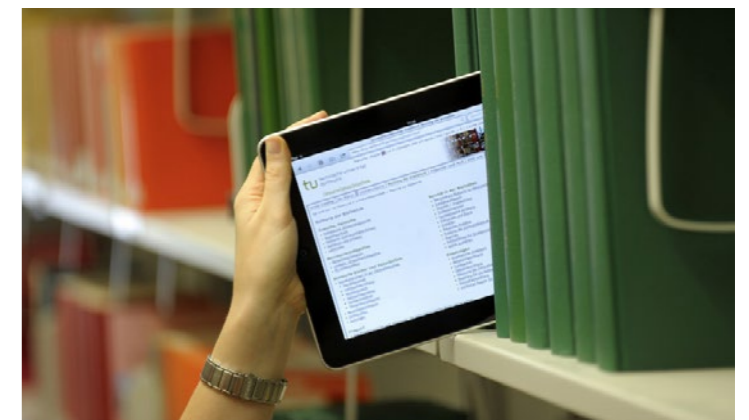
In order to be able to publish articles in open-access journals, fees usually have to be paid. TU Dortmund University has been financing this since 2015 from a fund managed by the University Library. From 2022 onwards, the German Research Foundation (DFG) repeatedly provides TU Dortmund University with a grant of around 330,000 euros for open-access publications for three years. In order to make the publications of TU members more visible on an international, the university also issues a publication guideline.

April | Daycare "Schlauschlumpfe"

## New childcare places for children under three



The first of two new daycare centers opens on the South Campus: It offers nine places for children of university members. Children under the age of three are looked after by trained daycare workers. With the new building, TU Dortmund University is continuing to invest in ensuring a better balance between work, studies and family.





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April 26 | Initial Spark

## Visit from Nobel Prize winner Prof. Erwin Neher



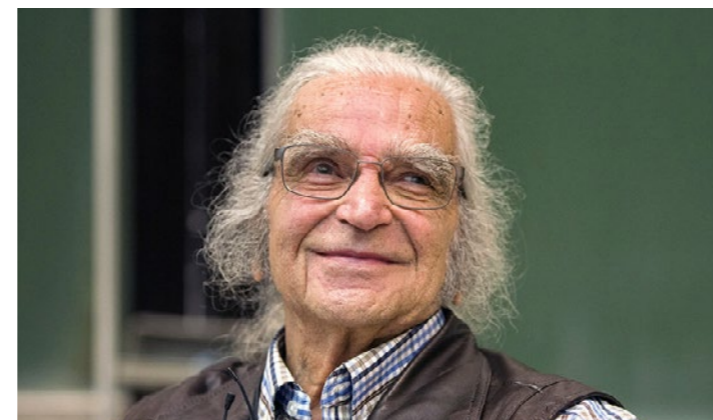
After a long COVID hiatus, the “Initial Spark” event series makes its return: In front of hundreds of listeners in the main lecture hall, Prof. Erwin Neher speaks about how he was able to detect ion channels in cells more than forty years ago and what importance they have for contemporary medicine. Neher received the Nobel Prize in Medicine in 1991 alongside his col-

league Bert Sakmann. In the late 1970s, the two scientists had developed a method that made it possible to prove for the first time that muscle cells generate electrical currents by opening sluices in the cell membrane for a few milliseconds that can let charged atoms in or out – ion channels.

14 June | Dortmund Science Conference

## Contemporary witness Horst Selbiger tells his story

As part of the Dortmund Science Conference, whose motto is “connecting generations”, the 94-year-old Holocaust survivor Horst Selbiger talks about his childhood as a Jew in National Socialist Germany in the main lecture hall. As one of the last survivors and eyewitnesses of the Nazi dictatorship, Horst Selbiger encourages everyone to become “witnesses of the witnesses”, and thus bridge the gap between the generations. The lecture was organized by Prof. Egbert Ballhorn and his team from the Department of Catholic Theology.



December | Award

## eldorado\* honored with three campus radio awards

The Campus Radio Prize of the State Media Authority of North Rhine-Westphalia is one of the most important awards for radio producers in university radio. eldorado\*, the campus radio of the Dortmund universities, receives three prizes in 2022: It wins over the jury in the categories of podcast, colleague discussion and moderation. Miriam Jagdmann and Lina Wiggeshoff win the podcast category. Lea Hollender comes out on top in the colleague discussion category. The award for moderation goes to Malte Harzem.

Summer semester | Lecture series

## Good science requires good communication

Tobias Kreutzer, an academic staff member at the Institute of Journalism, gives a series of lectures on the role of science communication. Successful communication can help citizens gain confidence in scientific processes. His lectures convey the basics and go into the particulars of the various disciplines: Any interested scientists are invited, all departments of TU Dortmund University are covered in turn.

23 May | “The Knowledge Makers”

## Ralph Caspers talks about science on TV



Quarks presenter Ralph Caspers (right) and film producer Tanja Winkler (center) talk about “Science in front of the camera” in the main lecture hall. As part of the series “The Knowledge Makers”, they both explain to the audience how science can be conveyed in front of the camera and answer numerous questions. During their lecture, they also show examples from two films

that they produced together with the Chair of Science Journalism under the direction of Prof. Holger Wormer (left). The series “The Knowledge Makers” has been taking place since the 2003/04 winter semester. It is an event organized by the Chair of Science Journalism with Ruhr-Universität Bochum and the Institute for Advanced Study in the Humanities (KWI) Essen.

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October | Protests in Iran

## Violence against Iranian universities condemned

Vice President International Affairs Prof. Tessa Flatte (left) and Dr. Barbara Schneider (right) from the International Office condemn the violence against students and university staff who are demonstrating peacefully in Iran in defense of human rights in response to the death of Mahsa Amini. On behalf of TU Dortmund University, they express their solidarity with the courageous women and men fighting against oppression and discrimination at the Iranian universities, which stand for education, freedom and a peaceful exchange of knowledge.



November | Translation of "Leaves of Grass"

## Hollywood star supports book project



For eight years, almost 80 students and scientists at TU Dortmund University translated the first edition of the volume of poetry "Leaves of Grass" by the American author Walt Whitman, first published in 1855. Alongside the actor and artist Armin Mueller-Stahl, the bilingual book is presented in the well-attended main lecture hall. Mueller-Stahl painted the striking

portrait of the author, which can be seen on the first page of the newly published edition. The 91-year-old comes to Dortmund at the invitation of Prof. Walter Grünzweig, Professor of American Literature and Culture at the Department of Cultural Studies. His painting is exhibited in the Museum of Art and Cultural History.



May | Global Gallery

## Prizes awarded for international projects



At the Global Gallery, three outstanding projects with an international focus are honored. The guests choose their favorites from the 29 initiatives presented: a digital integration platform as well as projects for flood protection in Bangkok and the development of pedestrian infrastructure in Nairobi. President Prof. Manfred Bayer (left) and Silke Viol (right) from the

International Office congratulate the project representatives (from right to left): Philip Popien, Dorcas Nthoki Nyamai and Tobias Mezger. The first-ever internationalization awards presented in four categories go to: Prof. Kevin Kröniger (teaching), Prof. Peter Posch (research), Brigitte Trimpe (administration) and Dr. Sascha Feldhorst (transfer).

Winter semester | TU Dortmund Young Academy

## New funding program for researchers with a doctorate

Ten scientists successfully applied for financial support from the "TU Dortmund Young Academy". In addition, the researchers with a doctorate in the new funding program have access to an accompanying program that helps them build up a profile with strong third-party funding. At the kick-off meeting, Dr. Maria Verena Peters (left) welcomes seven recipients: (from left to right) Dr. Lukas Wojarski, Dr. Raja Herold-Blasius, Dr. Raphael Beier, Dr. Ramona Thuemmler, Dr. Isabel Neitzel, Dr. Luise von Keyserlingk and Dr. Steve Schlegel.



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November | Honorary doctorate

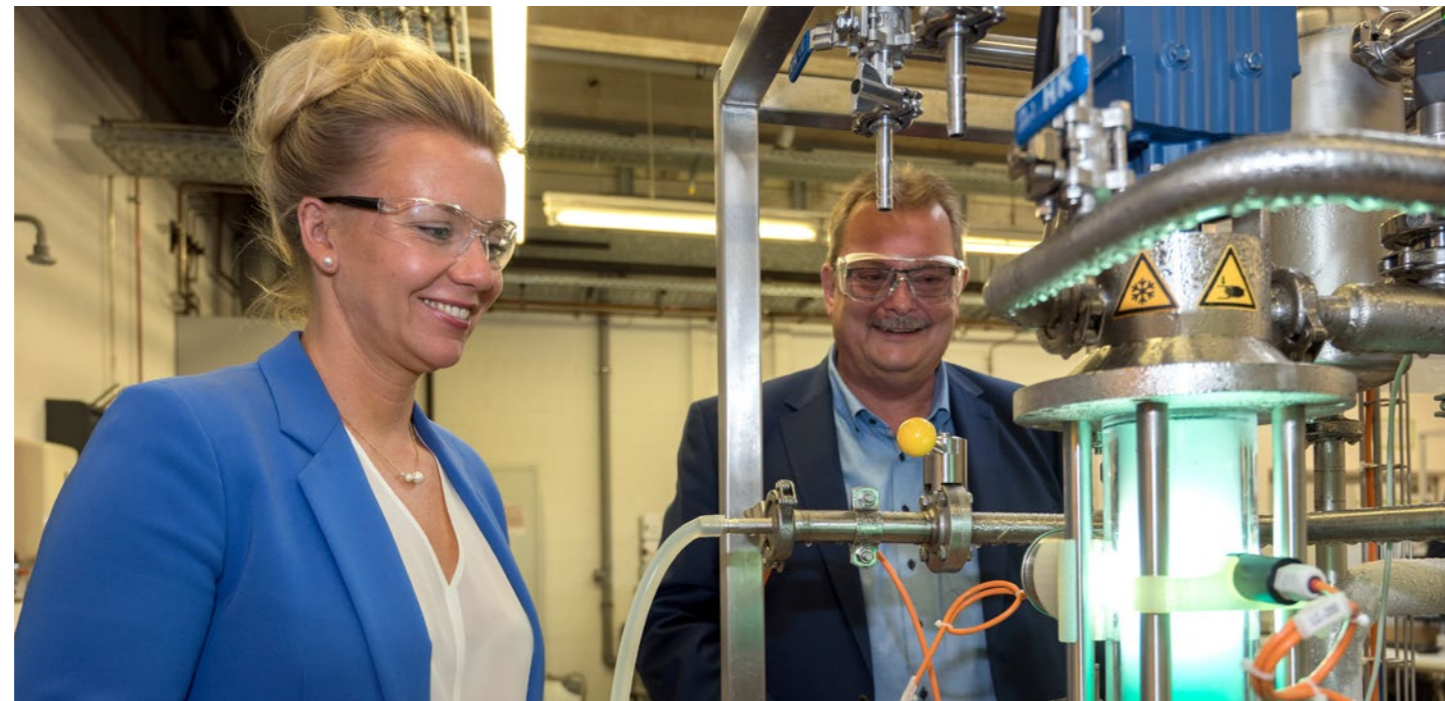
## Computer science celebrates 50<sup>th</sup> anniversary

The Department of Computer Science celebrates its anniversary with a ceremony in the Goldsaal of the Westfalenhallen. When it was founded in 1972, the IT department at the then University of Dortmund was one of the first of its kind. Today, the department is one of the largest in Germany. This was the source of important inspiration for computer science and the internet in Germany came. At the ceremony, President Prof. Manfred Bayer (right) and Dean Prof. Gernot A. Fink (left) present the Chair of the Council of Science and Humanities, Prof. Dorothea Wagner (center), with an honorary doctorate.



September | Exchange

## Minister of Science visits the campus



TU Dortmund University welcomes Minister of Science Ina Brandes (left) to her inaugural visit. The Dortmund native talks to President Prof. Manfred Bayer about in-person teaching in the winter semester despite rising energy costs and about the opportunities for joint research in the Ruhr University Alliance. The minister found out how TU Dortmund University works on sus-

tainable solutions for production technology in the laboratories of the Department of Biochemical and Chemical Engineering and in the hall of the Institute of Forming Technology and Lightweight Construction. Gerhard Schembecker (right), Professor of Plant and Process Engineering, shows how energy can be saved by around 85% when separating water and salts.

16 December | Academic Anniversary Celebration

## Celebration marked by pressing future questions



After a two-year hiatus brought on by the pandemic, the Academic Anniversary Celebration of University can be held in person again. President Prof. Manfred Bayer welcomes around 800 guests in the main lecture hall. He emphasizes the significance of the universities in light of the numerous challenges of our time and calls for action: “Energy transition, sustainability, the demand for skilled workers – who can we

expect to develop solutions for pressing future questions, if not us at the universities?” Keynote speaker Prof. Aladin El-Mafaalani also looks at a social issue of the future and talks about “Migration: The Mother of – or Solution to – All Problems?”. Before the traditional reception in the canteen, numerous prizes are awarded during the celebration (see chapter People).

September | Department anniversary

## Mechanical engineering celebrates its 50<sup>th</sup> birthday

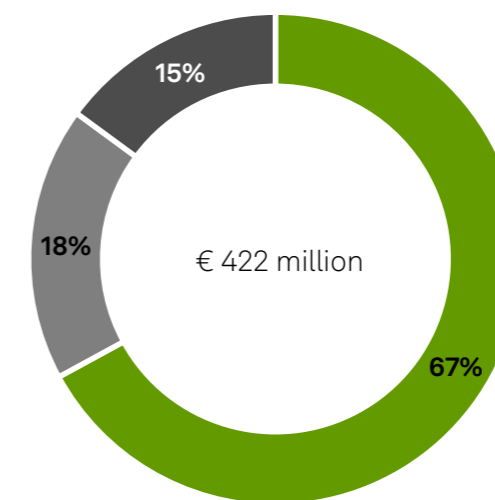
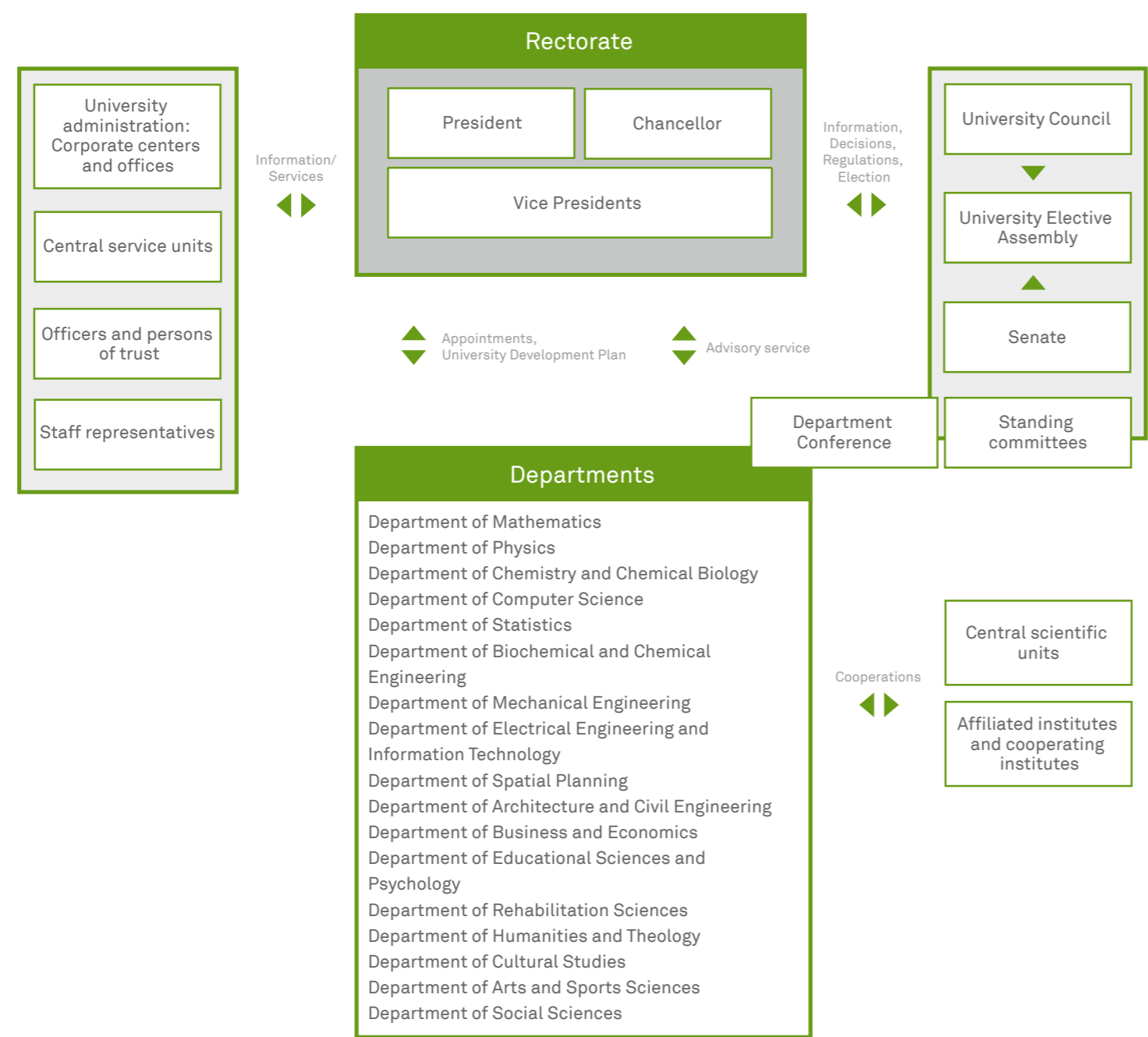
Teaching in production engineering began at the University of Dortmund in 1971 – the year the Department of Mechanical Engineering was born. The department celebrates its 50<sup>th</sup> birthday in 2022 with a gala in the main lecture hall. The “Department of Production Technology”, which was only renamed to Mechanical Engineering in 1975, has now become one of the university’s faculties with the highest third-party funding. The Institute for Forming Technology and Lightweight Construction (IUL), which started as a chair in 1972, also celebrates its 50<sup>th</sup> anniversary.

September | Department anniversary

## 50 years of electrical engineering and information technology

Today’s Department of Electrical Engineering and Information Technology was formerly just the “Department of Electrical Engineering”. It is celebrating its 50<sup>th</sup> birthday with a gala. With its developments – such as the test center for high-voltage direct current transmission – the department is making an important contribution to the energy transition. Department members also attract worldwide attention every year when they compete in international championships with their soccer robots.

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- Human resources: € 283 million
- Rent, energy, operating costs: € 76 million
- Material costs, investments: € 63 million



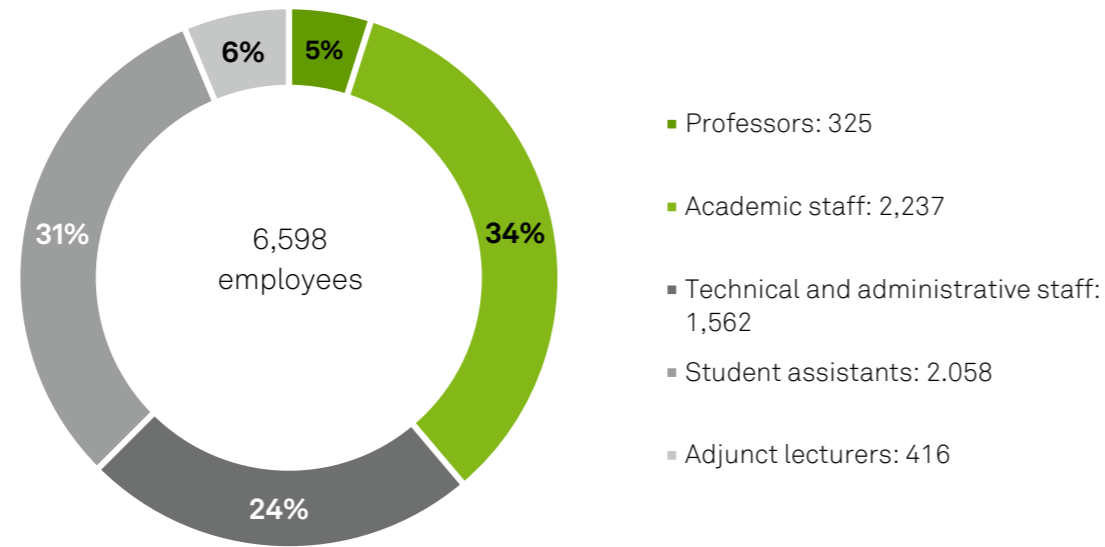
### Overall Structure of TU Dortmund University

The Rectorate presides over TU Dortmund University. The members of the Rectorate are elected by the University Elective Assembly, a body composed of the University Council and the Senate. The academic community comprises 17 departments in the natural and engineering sciences, social sciences and cultural studies. The deans convene in the Department Conference. The departments also work together with the university's central scientific units and a number of non-university research institutes nearby. University administration as well as the central service units see themselves as service partners for research and teaching operations. Officers, staff representatives and the standing committees also contribute to shaping the university.

### EUR 422 Million Total Expenditure by TU Dortmund University

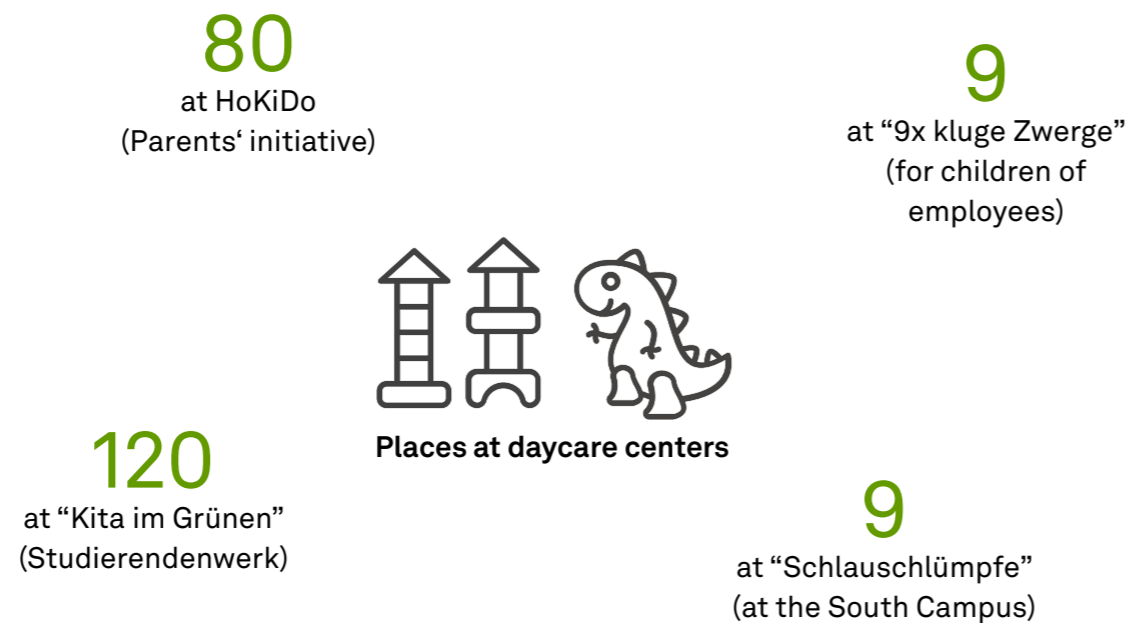
The total expenditure by TU Dortmund University for 2022 is around EUR 400 million – equivalent to the budget of a large corporation. Human resources account for most of the expenditure. A good 60 percent of the total expenditure is covered by the university's core funding. The remaining budget comprises third-party funds and fixed-term program funds from the federal and state governments.

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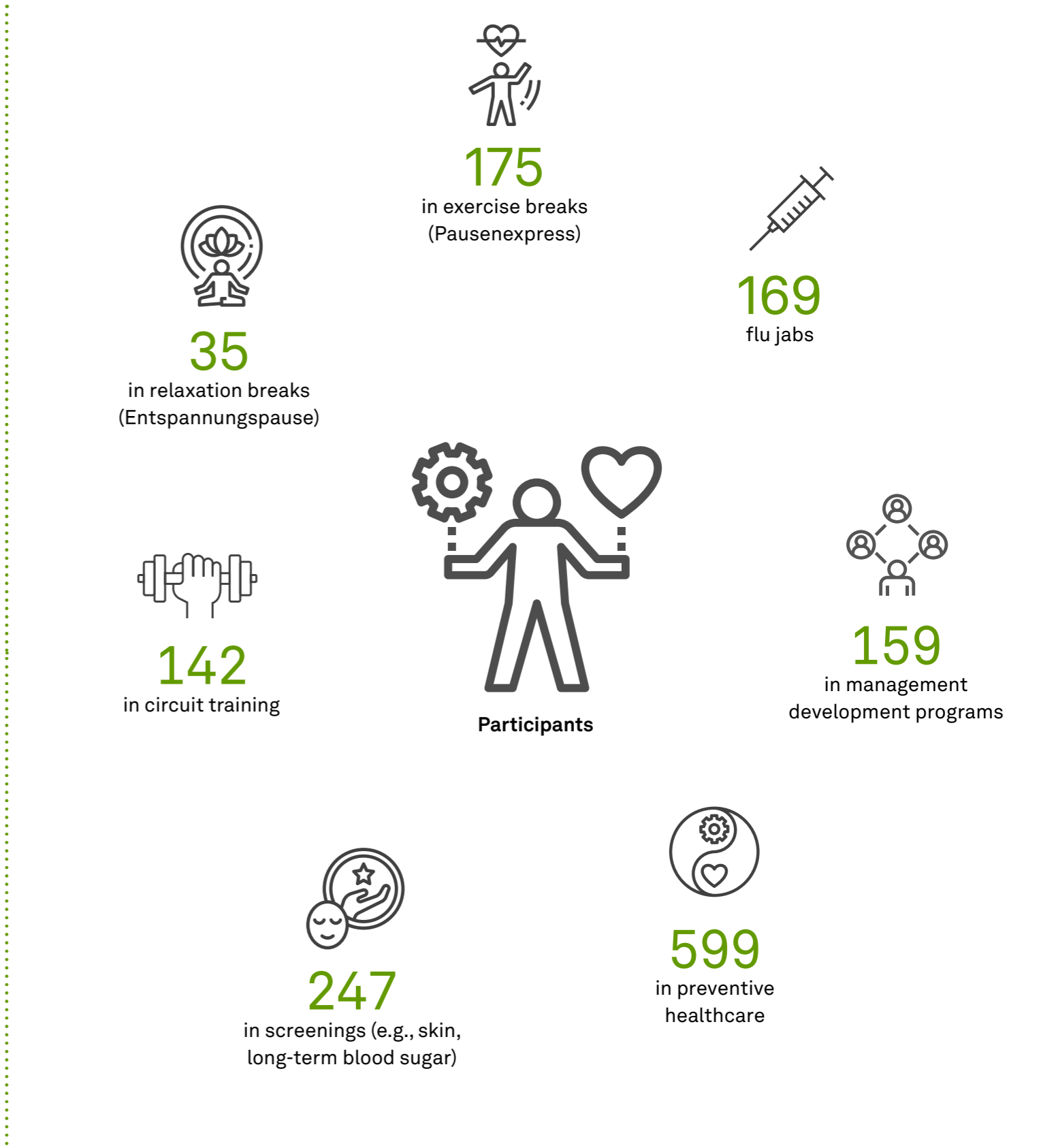
### One of the Largest Employers in the City

Around 6,600 people work at TU Dortmund University, including more than 320 professors. With about 120 apprentices and trainees in technical services and administration, TU Dortmund University is one of the largest training organizations in the city.



### Childcare

As a family-friendly university, TU Dortmund University fosters the compatibility of family and studies or career. In 2022, there are around 220 nursery and pre-school places near campus.



### A Healthy Working Environment

As an employer, TU Dortmund University is also dedicated to the topic of health and takes a holistic approach. On the one hand, there are offers that encourage individual healthy behavior and, on the other, measures to create a healthy working environment. Occupational Health Management is responsible for coordinating measures.

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19 May | Digital accessibility

## DoBuS participates in international campaign day

Images and videos are now central to websites, teaching materials and social media. So, for “Global Accessibility Awareness Day”, the worldwide campaign day for digital accessibility, TU Dortmund University is highlighting the importance of alternative texts for images and subtitles in videos for visually impaired people. The Disability and Studies Department (DoBuS) offers several short workshops on implementing alternative texts and subtitles on this campaign day.

21 October | NRW State Police Orchestra

## Benefit concert raises funds for inclusive music project

The Department of Rehabilitation Sciences organizes a benefit concert in the main lecture hall together with the State Police Orchestra of North Rhine-Westphalia, conducted by Scott Lawton. Music from a wide variety of genres is on the program. NRW Minister of the Interior Herbert Reul, as the sponsor, gives a welcoming address. During the break, Dr. Reiner Haus from TU Dortmund University explains the charitable purpose of the concert: All donations go towards the inclusive music project “Basic Rights in Easy Language”.

July | New competence center

## More digital accessibility in NRW



The new “Competence Center for Digital Accessibility NRW” is launched at TU Dortmund University. It helps universities in North Rhine-Westphalia reduce deficits in the implementation of the legal requirements for digital accessibility. The project will be funded for two years with around 690,000 euros as part of the Digital University NRW initiative by the Ministry

of Culture and Science. DoBuS, the Disability and Studies Department at TU Dortmund University, is in charge of this project. Dr. Anne Haage (left) and Anne Pferdekämper (right) from DoBuS work together with three colleagues on the project. A total of 27 universities announce their intention to get involved in the Competence Center.

June | Networking

## Female professors found Female Faculty Club



The Female Faculty Club is founded at TU Dortmund University: The Rectorate invites all professors, junior professors and professorship representatives to the DASA World of Work exhibition to network. In addition to the informal exchange, strategic goals are also discussed in the future, such as paths to a professorship for women, gender pay gap or successful committee

work. In the 1980s, there was a regular network meeting at the University of Dortmund, but at that time, the number of female professors was still only enough to fill one table. Since then, the number has increased to almost 100; however, the proportion of women at the professorship level is still well below parity.

March | University Library

## Increased availability of accessible texts

The Service for the Blind and Visually Impaired (SfBS) of the University Library is now an “authorized body” under copyright law. The SfBS, together with the Disability and Studies Department (DoBuS), provides blind and visually impaired students and employees with barrier-free literature. As an “authorized body”, the service may now also convert literary works that are available in text or audio format, graphic recordings of musical works and illustrations contained in language or musical works into accessible formats.



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July | New guidelines

## Name changes made easier



TU Dortmund University has long supported the wish of trans, intersex and non-binary students to have their new first name entered in the university's databases, documents and email addresses before a court order is issued. The university has developed new internal guidelines to ensure that the process of changing first names early within the university is re-

liably regulated. All parties involved benefit from the process no longer being determined by a series of individual decisions. If they wish to change their name, students can seek confidential advice from the Staff Unit Equal Opportunity, Family, Diversity.

September | Europa InTakt

## International congress on music and inclusion

The congress "Europa InTakt: Classic goes digital" takes place at TU Dortmund University, which is dedicated to new developments in the field of digital media in relation to traditional instruments. The focus is also on the topic of music and inclusion, with people with and without disabilities coming together to make music. The organizer is Prof. i.R. Irmgard Merkt from the Department of Rehabilitation Sciences. There has been a European exchange of ensembles in which people with and without disabilities work together since 2003.



June | TU-SUGR structural project

## Structurally promoting gender-specific research

A new structural project funded by the Federal Ministry of Education and Research is launched at TU Dortmund University: Under the title "TU-SUGR" – the abbreviation stands for "TU Dortmund Support for Gender in Research" – research is conducted into how gender-specific research can be structurally funded and sustainably established. In a first concept phase, interdisciplinary discussions are to be encouraged and the need for support identified.

March | New guidelines

## Protection against discrimination and sexualized violence

TU Dortmund University adopts guidelines for protection against discrimination and sexualized violence, with which it aims to proactively promote anti-discrimination efforts. The university is committed to tracking down discrimination and sexualized violence relentlessly and to sanctioning it within the scope of the legal and factual possibilities. To this end, a central advisory center will be set up from 2023, which the state of North Rhine-Westphalia will fund with around 300,000 euros for three years.

July | Cooperative project

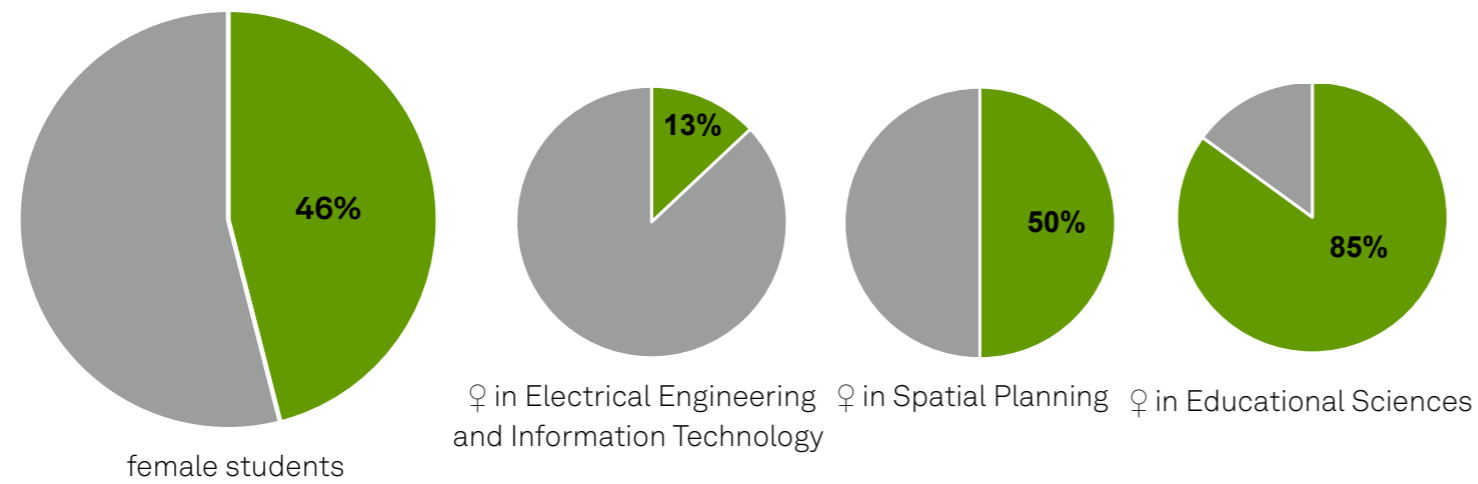
## Ideas for more inclusion and participation



In the Rombergpark botanical garden, a 100-meter-long footbridge is set to provide barrier-free access to the Moorkate area with the amphitheater. Students from the Department of Architecture and Civil Engineering developed ideas for this and present their plans for the bridge construction in the Moor-Heide landscape to the public. All four drafts will go on to be

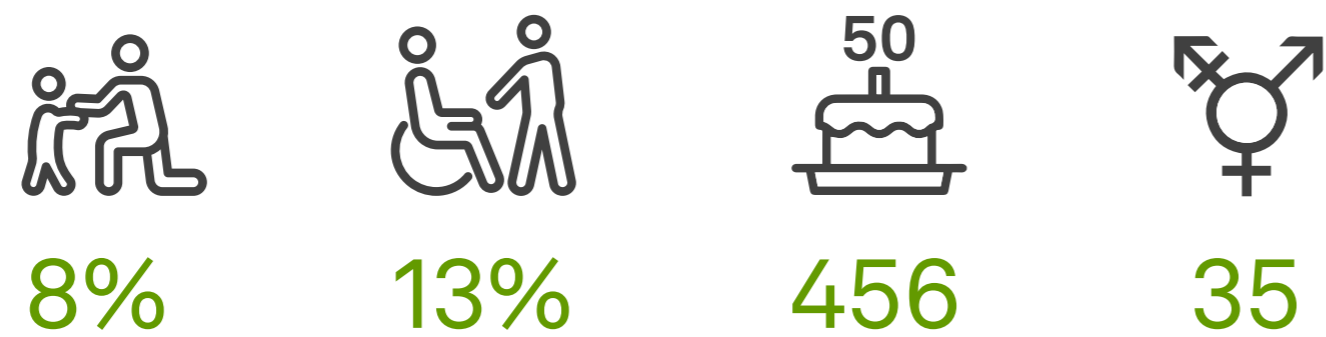
included in the planning. The students were invited to work in teams of two to develop ideas and even make models as part of a term paper. They were overseen by their lecturers Anne Hangebruch, junior professor for solid construction, and Ingo Münch, professor for structural mechanics, statics and dynamics.

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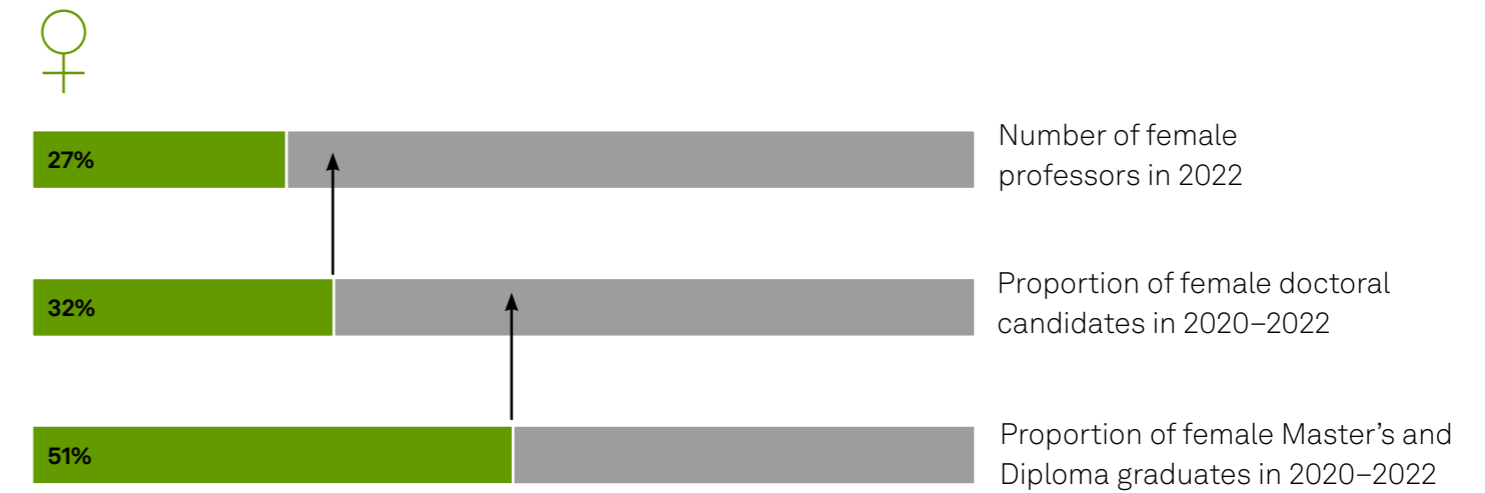
### Different Study Preferences

The gender ratio among students is almost balanced: The overall proportion of women is 46 percent. However, the number of women and men in the individual Bachelor's degree programs differs. Various programs aim to inspire female school students to study subjects in which women are still underrepresented.



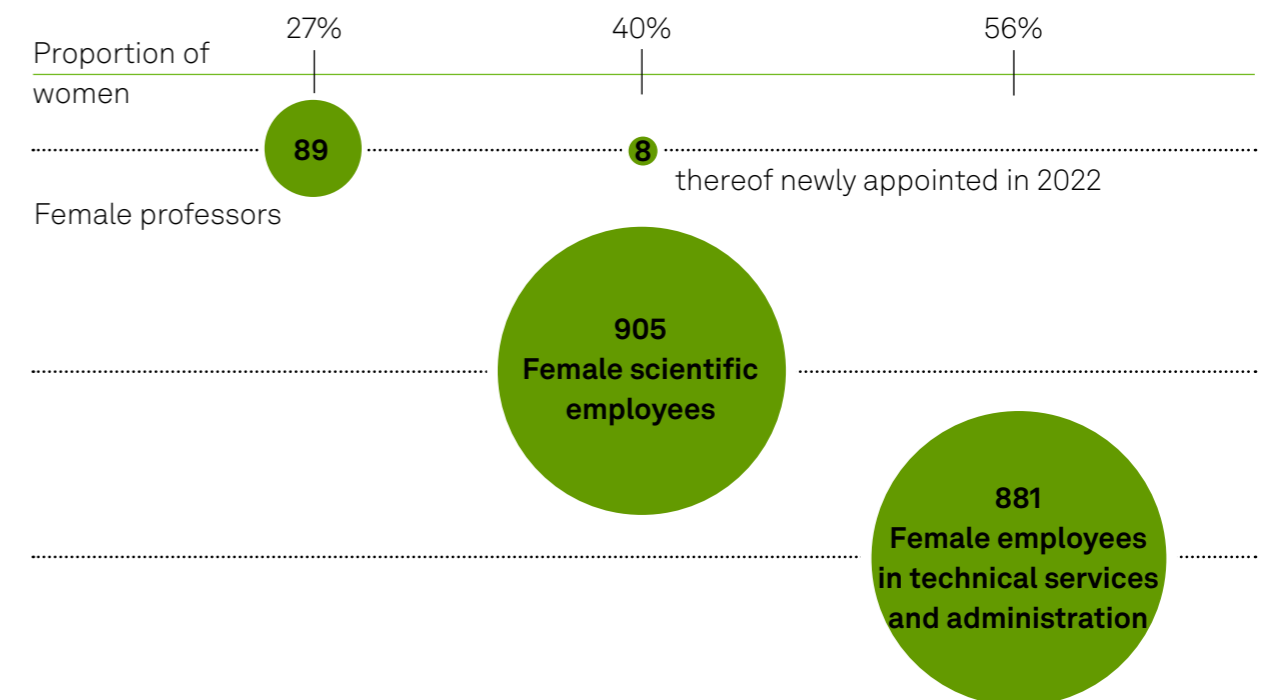
### Diverse Student Body

About eight percent of students have one or more children. 13 percent of students have an impairment that makes studying difficult. More than 450 students are over 50 years of age. 35 students do not identify as either a woman or a man.



### Increasing Proportion of Women in Accordance with Cascade Model

The proportion of female professors has increased from 17 to 27 percent since 2008. The intention is to raise this further. This does not involve fixed quotas, but rather the cascade model: According to this, the existing proportion of women at one career level in a subject sets the target for the next higher one.



### Proportion of Women Among Staff

A total of over 1,800 women work at TU Dortmund University. In 2022, the proportion of professorships held by women is 27 percent. Of the scientific employees, 40 percent are women, and of those in technical services and administration, the proportion of female employees is even higher at 56 percent.



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Annual figures | studium oecologicum

## 160 students acquire additional qualifications



Since the 2021/22 winter semester, TU Dortmund University has been one of the first universities in Germany to offer the *studium oecologicum*. Through this additional qualification, students acquire interdisciplinary skills on the subject of sustainability beyond their own subject. The lecture series “Climate: Change, Values, Science” or “Education for Sustainable

Development” form the core module. Every semester, ten departments contribute with around 40 classes. By the end of the year, around 160 students had registered for the additional qualification. In the 2022 summer semester, Dr. Henning Moldenhauer (left) from the Sustainability Office hands over the first certificate to Aileen Böcker (right).

Summer semester | Lecture series

### Lectures on “Education for Sustainable Development”

A digital lecture series combines the topics of sustainability and education. The interdisciplinary lectures deal with the political, social and psychological requirements of education for sustainable development. For example, controversial issues in schools and classrooms, education for sustainability and human rights or world poverty and ecological justice are discussed. The event was initiated by Prof. Claudia Gärtner from the Department of Catholic Theology.

Winter semester | Lecture series

### Lecture series on “Climate: Change, Values, Science”

In a total of thirteen lectures, lecturers from TU Dortmund University and other universities and institutions examine the topic of climate protection. For example, they also cover resource efficiency, biodiversity and climate journalism. The participants gain an interdisciplinary insight into climate research and reflect on their own contribution to the topic. Dr. Henning Moldenhauer opens the series by talking about the emergence of the climate crisis.

April | iResilience

## Handbook on climate change adaptation unveiled

The joint project iResilience publishes a handbook on climate adaptation in urban areas. Since 2018, the team led by Stephanie Bund from the Social Research Center (sfs) of TU Dortmund University has been conducting researching in real laboratories in Dortmund and Cologne, investigating how cities can arm themselves against the challenges of climate change. iResilience presents findings on climate-resilient district development in a free handbook. The book is primarily aimed at other communities that want to decide whether real laboratories are also right for them.



March | “Renew Education and Science in Iraq” project

## Student conference at the University of Mosul



Over 500 students attend a conference on sustainability at the University of Mosul in Iraq. Under the topic of “Sustainability – A concept to guide reconstruction and reconciliation processes?”, the participants address the question of how sustainable development in Mosul and the region can be promoted. They also discuss potential project ideas. The conference is

organized as part of the DAAD-funded project RESI, “Renew Education and Science in Iraq”, in which TU Dortmund University and the Universities of Graz and Mosul are collaborating. Events have been held since 2016 to promote scientific discourse in Mosul.

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October | InnaMoRuhr

## NRW Transport Minister Oliver Krischer opens a bicycle hub on campus

The Transport Minister of the state of North Rhine-Westphalia, Oliver Krischer, inaugurates the first lockable bike parking station on the TU Dortmund University campus. Selected TU members taking part in a real laboratory of the InnaMoRuhr research project can safely and conveniently park their bicycles there for three months. The bike station at the intersection of Vogelpothsweg and Otto-Hahn-Strasse was created as part of the InnaMoRuhr project, which has been funded by the NRW Ministry of Transport since 2020 and involves researchers from the three UA Ruhr universities in Dortmund, Bochum and Duisburg-Essen.

In order to evaluate what effect the bicycle hub has on the individual everyday mobility of the TU members, the participants are tracked and analyzed be-

fore, during and after the real laboratory with the specially developed InnaMoRuhr app. The bicycle hub is designed to make it easier for TU members to switch from their car to their bike when commuting from their home to the university. In addition to the bike station, which is particularly attractive for high-quality e-bikes, the hub also includes a free repair service.

With the bicycle parking facility, TU Dortmund University is laying more important groundwork in its sustainability strategy and taking a step towards the mobility of the future. For the grand opening, (from left to right) TU Chancellor Albrecht Ehlers, Dortmund's Deputy Mayor Barbara Brunsing, Transport Minister Krischer and project manager Prof. Johannes Weyer from the Department of Social Sciences arrived on their bicycles.



April–June | Bicycle competition

## TU members participate in “Saddle up for the climate”

61 active cyclists from TU Dortmund University took part in the first three-month bicycle competition “Saddle up for the climate”, organized by the Verkehrsclub Deutschland, and rode a combined 18,556 kilometers. This puts the university in fourth place among all universities. As result of the competition, 35.9 tons of CO<sub>2</sub> are saved. The switch to cycling not only reduces greenhouse gas emissions – it also promotes health and the quality of life in cities.

Winter semester | Self-commitment

## Business trips by bus and train instead of car or plane

On the initiative of the sustainability working group, a self-commitment declaration is available in the ServicePortal, which TU members can use to confirm that they want to forgo short-distance business flights and car trips. Instead, more climate-friendly alternatives such as trains or long-distance buses should be used for business trips. If possible, business trips can be avoided entirely by switching to video conferences.

June | CITY CYCLING

## TU Dortmund University tops team ranking again



Covering around 91,000 kilometers, TU Dortmund University won the team ranking of the Dortmund CITY CYCLING for the third time in a row. Over 500 TU members take part in the campaign for active climate protection and using their bikes as often as possible for three weeks. Within TU Dortmund University, the “Math Team” cycled the longest distance at 12,583

kilometers. In the individual ranking, the mathematician Isabell Strotkamp came in first for women and the mathematician Timm Treskatis for men. At the award ceremony with Mayor and CITY CYCLING patron Thomas Westphal (second from left), the Math Team accepts the honors on behalf of TU Dortmund University.

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Summer semester | Hands-on activities

## TU members take action for biodiversity



The Sustainability Office promotes biodiversity on campus through various campaigns. For example, a seed library is set up in the University Library, where open-pollinated flower and vegetable seeds can be exchanged. In addition, a total of 19 nesting boxes are hung on the trees on campus, offering shelter to numerous bird species such as chickadees, spar-

rows, nuthatches and starlings. JProf. Thomas Liebig and Prof. Stephan Lütz (from left to right), who are involved in the lecture series “Climate: Change, Values, Science”, are also participants. In addition, the Sustainability Office creates flowering meadows together with the AStA, the Corporate Center Construction and Facility Management and a team of helpers.

May | Humboldt<sup>n</sup>

## Sustainability initiative launched by NRW universities

TU Dortmund University takes part in the kick-off conference of Humboldt<sup>n</sup>, the sustainability initiative of the 16 universities in North Rhine-Westphalia. University presidents, students, representatives from NGOs and from business as well as the NRW Minister for Culture and Science Isabell Pfeiffer-Poensgen (third from left, Minister until June 2022) are present for the event. The aim of the initiative is to jointly pursue sustainability goals. At the opening of a poster exhibition, TU Dortmund University presents the *studium oecologicum* course and explains the challenges of building renovation.



August | Summer school

## Innovations for a sustainable campus

The Center for Entrepreneurship & Transfer (CET) organizes a summer school that teaches the concept of design thinking and addresses the relevance of sustainability in innovation processes. Over the course of a week, the participants develop new solutions for a sustainable campus, tackle various challenges in teams and pitch their ideas to a jury. This also includes workshops, a basic corporate strategic planning simulation and a panel discussion with industry experts.



February | Paper consumption

## Modern scanners replace old copiers



A total of 12 modern scanners go into operation on campus. In the Central Library, departmental libraries, and the foyers of central buildings, they replace the previous printers and copiers. With the new scanners, documents and texts can be scanned and stored on storage devices faster than before. By eliminating the copiers, TU Dortmund University uses around 1.5 mil-

lion fewer sheets of paper per year. In doing so, the university reduces its paper consumption and thus comes one step closer to meeting its sustainability goals. The scanners can be used free of charge. The decision to replace the old devices was made in July 2021 together with the General Student Committee (AStA).

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September | Energy Saving Ordinance

## Room temperatures lowered to 19°C



On 1 September, the Energy Saving Ordinance EnSi-kuMaV comes into force nationwide. From now on, rooms may only be heated up to 19°C. This applies to laboratories, lecture halls and offices. In order to reduce energy consumption, the night-time reduction comes into effect as early as 5 p.m. and the heating is no longer increased during the day over the week-

end. Moving forward, only cold water will be available at hand wash basins. The outdoor lighting is reduced, and there are no fairy lights during Advent. The University Library lends out thermometers so that employees can measure the room temperature and set it correctly. After all, 70 percent of the rooms are not heated centrally, but rather manually using thermostats.

Second semester | Back on campus

## Appeal to save energy: TU logo switched off

In August, to set an example and draw attention to the urgent need to save energy, the university turns off the TU logo on the Math Tower. Otherwise, rotation and lighting consume more energy than a four-person household. Meanwhile, preparations are being made to maintain on-site operations in research and teaching during the winter semester despite the energy crisis. The university has pledged to save 20 percent on gas consumption. In return, the institutions of higher education are considered a protected operation in the event of a gas shortage.



January to December | Energy figures

## Over 20 percent of heat energy saved

The university's energy-saving measures have provisionally achieved their objective: When viewed over the whole of 2022, TU Dortmund University consumed 25 percent less thermal energy than in the pre-COVID year of 2018. This figure is already adjusted for climatic conditions. With electricity, the effect is less significant, with a saving of 4 percent. The following spring will show whether the savings measures are sufficient to save around 20 percent on gas in the 2022/23 heating period.

April to August | Cooling reduced

## Reduced energy consumption from early summer

TU Dortmund University started saving energy as early as April and lowered the temperature in centrally heated rooms to 20°C – lower temperatures are not currently permitted. The cooling temperature for the servers is increased from 20°C to 22°C. The cooling is also reduced in the University Library in the summer: In agreement with the students, the temperature can be increased up to 26°C, meaning the air conditioning only has to run at half power.

December | Energy transition

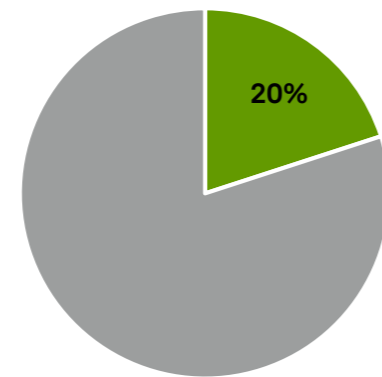
## Producing regenerative energy in-house



At the Academic Anniversary Celebration, President Manfred Bayer announces TU Dortmund University's intentions to invest in generating solar and wind energy in the coming years. He outlines the plan to build a 19,000 m<sup>2</sup> ground-mounted photovoltaic plant on Emil-Figge-Strasse from 2023. A solar field of this kind could produce around 2.1 GWh per year and thus cov-

er around 5 percent of the university's own electricity requirements. In addition, an application is set to be made to erect a wind turbine on the South Campus from 2024. A field next to the A45 is a possible location for this. The planned system could generate around 10 GWh of electricity per year, which corresponds to 25 percent of the university's own requirements.

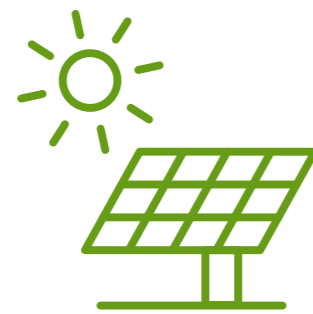
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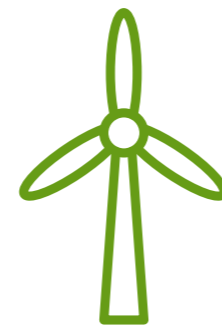
Saved 20 percent of gas

### Conserving Gas

Thanks to several extensive measures and the contributions of all participants, TU Dortmund University was able to reach its goal of saving 20 percent of thermal energy during the energy crisis in winter 2022/23. Thus, the university contributed to the EU conservation of gas and to ensure a general supply of energy during the winter.



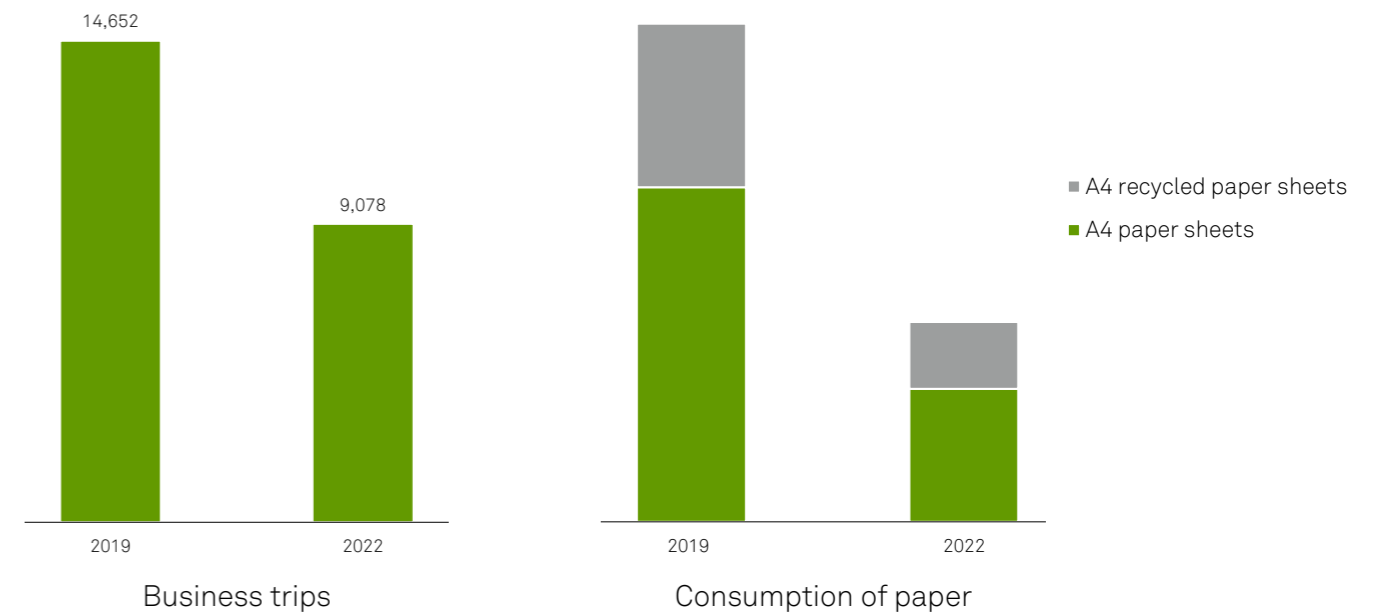
2023: A photovoltaic power station with a nominal power of 1,400–1,500 kWp



2026–2028: A wind turbine with an output of about 10,000 MWh per year

### Producing Renewable Energy

Currently, 50 percent of the electricity used at the university is already renewable energy. In the future, TU Dortmund University will increase the proportion of electricity and heat the university generates itself using renewable energy resources. In addition to the five established photovoltaic systems on campus, a new photovoltaic power station and a wind turbine will be built in the coming years in order to cover the majority of the university's demand for electricity. Furthermore, there are plans to build a wood pellet heating plant in 2024 for generating thermal energy.



### Conserving Resources

TU Dortmund University is making strides towards more climate change mitigation. Business trips by TU members have declined by 40 percent in comparison to the “pre-pandemic year” of 2019, the consumption of paper was even reduced by 60 percent. Alongside reducing unnecessary business trips and paper consumption, the university has set 19 additional goals in its sustainability strategy, which was adopted in 2021.

32 courses offered per semester

307 total registrations



10 departments

29 students who obtained the certificate

### Sustainability Certificate “studium oecologicum”

Sustainability and climate change mitigation are increasingly important and can only be achieved interdisciplinarily. Thus, TU Dortmund University supports education on sustainable development and research on topics relevant for the future. Since winter semester 2021/22, the university offers a sustainability certificate that students can obtain in addition to their regular studies by attending specific modules.

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# SOLIDARITY WITH UKRAINE



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 February | Outbreak of war

## Solidarity with Ukraine



The attack on Ukraine ordered by the Russian President on 24 February shocked the members of TU Dortmund University. Since the war broke out, TU Dortmund University has stood in solidarity with the victims and those affected as well as all those working for peace and democracy. Comprehensive support structures are being set up at the universi-

ty – for students and researchers who are already at TU Dortmund University, as well as for refugees who are welcomed on campus and to the city. Employees in administration and in the departments, TU students and the Association of Friends build up the diverse range of aid with great commitment.

 2 March | Sanctions

### Relations with Russia suspended

The universities in NRW publish a declaration together with the state: They are committed to solidarity with Ukraine and are suspending academic relations with Russia until further notice. At TU Dortmund University, none of the around 900 third-party funded projects have to be completely discontinued due to the sanctions. However, three projects have to continue without the involvement of Russian partners, including the successful Collaborative Research Center/Transregio 160 from physics.

 March | Guest stays

### Program for refugee scientists launched

One month after the attack on Ukraine, the Rectorate launches a guest program to enable scientists threatened by the war to spend several months at TU Dortmund University. The aid program is financed by the Rectorate and the host department. To facilitate communication and integration, language courses are part of the support offered. The program is intended as start-up funding to ensure research can be continued despite the displacement.

 June | Peace concert

## Sign of peace and understanding

The Dortmund Mozart Society is organizing a peace concert in the Dortmund Concert Hall with a diverse program featuring Ukrainian and Russian musicians. For members of TU Dortmund University, the Association of Friends (GdF) purchases 100 tickets, which are distributed to international students in the first step. The proceeds from the concert go to the aid organization CARE for people in Ukraine and to the Dortmund Clinic for Pediatric and Adolescent Medicine, which helps sick refugee Ukrainian children and their families.

**FRIEDENSKONZERT**  
3. JUNI, 20 UHR, KONZERTHAUS DORTMUND



 March–December | Association of Friends

## Aid fund for affected students



The Association of Friends (GdF) of TU Dortmund University provides students affected by the war against Ukraine with quick and easy support. In March, it uses donations to set up an aid fund to pay out emergency aid of 500 euros. A total of 21 students can receive financial support by the end of the year. Thanks to the immediate support, some students can, for example,

pay their rent or the semester contribution first and then look for a part-time job. In total, the GdF pays out more than 10,000 euros. The Association of Friends not only appeals to its more than 500 members for aid fund donation, but also to the public.



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 July | Welcome event

## Students offer support to refugees



They play with Ukrainian children at a welcome club and teach refugee families German: Polina Mihal (left) and Mikhail Krigman (right) and other TU students with Ukrainian or Russian roots are committed to helping people who have fled Ukraine. TU Dortmund University supports a welcome event initiated by the Rotary Club Dortmund-Romberg together with the

KSF Vita association. At this event, up to 15 mothers receive important information about life in Germany, while their children are cared for and can play together. As part of the Rotary project “Language Connects”, students regularly visit families to learn German with them.

 August | Summer school

## Ukrainian students visit the UA Ruhr

30 students from Ukraine and their supervisors visit the Ruhr area for nine days in August: They are there taking part in the first summer school of the University Alliance Ruhr in cooperation with five Ukrainian universities. The program includes campus tours in Bochum, Dortmund and Essen as well as workshops, seminars and talks with the rectorates and individual departments. The cultural program includes visits to the Folkwang Museum, Bochum Planetarium, Zollverein Coal Mine and individual cities in the region and the Rhineland.



 March | European public

## Reporting on escaping Ukraine



Researchers at the Erich Brost Institute for International Journalism have been dealing with reporting on migration and flight for many years. Prof. Susanne Fengler explains what is important in current reporting and observes that a long absent European public is emerging.

 May | Platform for teachers

## Giving refugee children a good start at school



The team led by Prof. Christoph Selter from the Department of Mathematics provides materials for mathematics teachers so that children who have fled from Ukraine can get off to a good start at German elementary schools. Using the bilingual materials, children can quickly achieve success, which should help them build confidence in their own abilities.

 August–September | Photo exhibition

## Insights into evacuated art museum in Kyiv

The Russian war of aggression against Ukraine also threatens museums, which have to evacuate their exhibits. The photo exhibition “The Khanenko Museum | Kyiv” at the University Open Days in the Dortmunder U showcases photos of an major art museum with its halls emptied in spring 2022. The images indicate expectations and a glimpse into a future full of hope. The Seminar for Art and Art Studies at TU Dortmund University curated the exhibition alongside the “Bohdan and Varvara Khanenko National Museum of Arts” in Kyiv.



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May | Dialog with business and politics

## Prof. Biermann admitted to the NRW Academy

The North Rhine-Westphalian Academy of Sciences, Humanities and the Arts welcomes Prof. Dirk Biermann from the Department of Mechanical Engineering as one of ten new members. He is appointed to the Class of Engineering and Economic Science. The members are characterized by outstanding research work and maintain a dialog with actors from politics, business and culture. Biermann has been a professor at TU Dortmund University since 2007 and heads the Institute of Machining Technology. He is currently coordinating a DFG priority program there.



February | Professor Gabriele Sadowski

## Appointed to Council of Science and Humanities



President of Germany Frank-Walter Steinmeier appoints four new members to the Council of Science and Humanities for three years. Among them is Prof. Gabriele Sadowski. As a newly appointed member, she will advise the federal and state governments on the development of science, research and universities. "It is a great honor to be appointed to the Council of Sci-

ence and Humanities. I'm really looking forward to taking on this responsibility," says Sadowski. She has been a professor of thermodynamics at the Department of Biochemical and Chemical Engineering since 2001. In 2011, she was awarded the Gottfried Wilhelm Leibniz Prize, the most important research award in Germany, for her research in this field.

December | Expertise on energy networks

## International association honors Prof. Rehtanz

The Institute of Electrical and Electronics Engineers (IEEE) announces that Prof. Christian Rehtanz will join the group of Fellows on 1 January 2023. Rehtanz receives the prestigious award from the international professional association for its research and developments in the fields of long-range monitoring and protection and control systems for electrical energy networks. Appointed to TU Dortmund University in 2007, Prof. Rehtanz now heads the Institute of Energy Systems, Energy Efficiency and Energy Economics.



May | Production technology

## Prof. Tekkaya receives gold medal for his services



Prof. A. Erman Tekkaya is honored with the SME Gold Medal by the North American Society of Manufacturing Engineers (SME) for his services to technical communication in manufacturing engineering. The mechanical engineering professor has headed the Institute of Forming Technology and Lightweight Construction (IUL) at TU Dortmund University since 2007.

September | Chemical biology

## Prof. Waldmann awarded the Nauta Award



The European Federation for Medicinal Chemistry and Chemical Biology honors Prof. Herbert Waldmann (right) with the Nauta Pharmacochemistry Award for his pioneering work in medicinal chemistry and chemical biology. He is a professor at the Department of Chemistry and Chemical Biology and Director of the Max Planck Institute of Molecular Physiology.

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16 May | Outstanding theses

## Year's best students receive Hans Uhde Award



Four of the year's best students at TU Dortmund University are honored with the Hans Uhde Award for their theses in engineering: Patrick Böcker (Department of Electrical Engineering and Information Technology), Mario Ferdinand Hermes (Department of Biochemical and Chemical Engineering), Annika Möglich (Department of Mechanical Engineering) and Harun Teper (Department of Computer Science).

July | New chairperson

## Prof. Martina Brandt appointed to federal expert commission



Lisa Paus (right), Federal Minister for Family Affairs, Senior Citizens, Women and Youth, appoints the members of the Expert Commission for the Ninth Government Report on Older People. Martina Brandt (center), professor of social structure and sociology of aging societies, takes over as chairperson. The Commission will prepare the next report on the situation of the older generation in Germany.

November | European Research Council

## JProf. Max Hansmann receives ERC Grant



The European Research Council (ERC) funds the research of JProf. Max Hansmann from the Department of Chemistry and Chemical Biology with around 1.5 million euros over five years. From around 3,000 ideas submitted, the organic chemist's project was selected for one of the highly coveted ERC Starting Grants: In the CC-CHARGED project, Hansmann research-

es fundamentally new substance classes in organic chemistry. With the ERC Starting Grant, the European Research Council supports outstanding young scientists who have already done excellent research work. Hansmann has been a junior professor at TU Dortmund University since 2019 and has headed an Emmy Noether junior research group since 2020.

May | Research at CERN

## Two new Emmy Noether junior research groups

The Emmy Noether program of the German Research Foundation gives outstanding young scientists the opportunity to qualify for a professorship by independently leading a working group over a period of up to six years. Dr. Chris Malena Delitzsch (left) and Dr. Dominik Mitzel (right) from the Department of Physics each apply for their own funding. The particle physicists both work at the Large Hadron Collider (LHC), the world's largest particle accelerator, at CERN in Switzerland.



November | Outstanding postdoctoral researchers

## Rudolf Chaudoire Prize awarded

The 2022 Rudolf Chaudoire Prize 2022 goes to Dr. Miriam Schad (second from right) from the Department of Social Sciences and Dr. Christoph Lohmann (center) from the Department of Mathematics for their outstanding research. TU Dortmund University honors the two postdoctoral researchers with an award ceremony. The prize money of 5,000 euros is used to finance stays abroad, in this case in southern Europe and the USA. The Rudolf Chaudoire Foundation has been providing funds to support young scientists since 1995.



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27 September | Awards for master's degree

## Best teacher training graduates awarded



With a graduation ceremony, TU Dortmund University bids farewell to the graduate teachers of the 2021/22 academic year. The prizes, each endowed with 500 euros, for the best master's degrees in the five school types go to: Davina Klevinghaus (teacher training for special needs education, second from left), Thomas Boecker (teacher training at grammar schools, center), Saskia Garus (teacher training at vocational colleges,

second from right) as well as Christine Weiss (teaching training at elementary schools) and Alexander Lange (teacher training at secondary schools and comprehensive schools). In addition to Prof. Wiebke Möhring, Vice President Academic Affairs, Prof. Stephan Hussmann (left), Director of DoKoLL, and Guido Baranowski (right), Chairman of the Association of Friends of TU Dortmund University, also offer their congratulations.

August | New trainees

## TU Dortmund University welcomes 30 new trainees

30 young men and women start their training at TU Dortmund University in eleven different professions. In order to get off to a good start, they get to know the university as an employer over the course of an introductory week. A three-day trip to Hachen is also on the agenda, so they can get to know each other and engage in team building. As one of the largest training companies in the city, TU Dortmund University trains around 130 women and men in a total of 17 professions – from chemical laboratory assistants to media designers and material testers.



November | Representative of Severely Disabled Persons

## Katrin Stroop elected as the new spokesperson



In the election of the Representative of Severely Disabled Persons of TU Dortmund University, Katrin Stroop is elected as the spokesperson for severely disabled employees and those at risk of becoming disabled. Her four-year term begins in December. Her deputies are: Silke Adam, Livia Rüger, Tobias Zimmermann and Mirjana Vujanic.

July | General Student Committee

## David Wiegmann and Leonie Lippert to chair the AStA

David Wiegmann and Leonie Lippert are elected as new chairpersons by the General Student Committee (AStA) of TU Dortmund University. They represent the students vis-a-vis the University Management, the committees and the public. They had previously worked as speakers for university policy and sustainability at the AStA. As chairpersons, they plan to campaign for more student involvement in everyday university life, sustainability on campus and better vegetarian and vegan options in the canteen.



Summer semester | Visiting chair

## Prof. Andreas Jung teaches at the Department of Physics



The Department of Physics establishes the Ulrich Bonse Visiting Chair for Instrumentation. As the first visiting professor, Prof. Andreas Jung from Purdue University in the United States teaches at TU Dortmund University. Every semester, the department will welcome a new international guest. The German Academic Exchange Service (DAAD) supports the Chair.

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16 December | Academic Anniversary Celebration

## Awards for outstanding dissertations



After a two-year COVID hiatus, TU Dortmund University is again honoring its award winners as part of the traditional Academic Anniversary Celebration in the main lecture hall. This year, Prof. Nele McElvany (third from left), Vice President Research, presents the dissertation prizes to: Dr. rer. nat. Hennes Hajduk, Dr. rer. nat. Johann Erik Kirstein, Dr. rer. nat. Lena Quam-

busch, Dr.-Ing. Jan Eric Lenssen, Dr. rer. nat. Dennis Andreas Malcherczyk, Dr.-Ing. Heiner Veith, Dr.-Ing. Felix Kolpak, Dr.-Ing. Johannes Klein, Dr.-Ing. Oscar Manuel Baez Villanueva, Dr.-Ing. Jan Liedmann, Dr. rer. pol. Daniel Lukas Neukirchen, Dr. phil. Marc Mertes, Dr. phil. Sandra Danneil, Dr. rer. nat. Annette Rademacher and Dr. phil. Markus Kühnel.

16 December | TU Dortmund Young Academy

## Research award for Dr. Giovanni Zamborlini

For the first time, the research prize of the TU Dortmund Young Academy is awarded at the Academic Anniversary Celebration for outstanding research contributions by scientists with a doctorate below the level of full professorship. Prof. Nele McElvany (left) honors Dr. Giovanni Zamborlini (right) from the Department of Physics with the prize. As an award winner, he becomes a member of the Young Academy for up to six years. The program supports his work on the topology of two-dimensional molecular networks, which he investigates using angle-resolved photoemission spectroscopy.



16 December | Teaching prize

## Award for one of the most popular compulsory lectures



The teaching prize in the category of “Courses With More Than 60 Attendees” goes to Prof. Mario Botsch from the Department of Computer Science for his lecture “Mathematics for Computer Science 2”. The jury emphasizes that he has taken what was once one of the least popular courses and redesigned it in a way that it is now one of the most popular compulsory lectures.

16 December | Teaching prize

## Honored for special commitment to teaching



Dr. Gary Schmiedinghoff from the Department of Physics is awarded the teaching prize for “Courses With Up To 60 Attendees”. The jury emphasizes his exceptional commitment to the exercise group for the lecture “Thermodynamics and Statistics”. Students appreciate the hybrid offering, the variety of additional tasks and the integration into larger contexts.

16 December | Academic Anniversary Celebration

## Awards for year’s best theses

Guido Baranowski (second from left), Chairman of the Association of Friends of TU Dortmund University, and Prof. Wiebke Möhring (third from left), Vice President Academic Affairs, will hand over the prizes for the year’s most outstanding theses. The prize-winners are: Maximilian Esser, Carolin Sophie Harkort, Annika Schmidt, Gerrit Nolte, Marieke Stolte, Moritz Heinlein, Silas Andreas Fischer, Nathalie Müller, Moritz Lippold, Oliver Berns, Hannes Schwarz, Anke Kistner, Sophie Teborg, Helen Brück, Katrin Odermann, Jonas Zerweck and Nadine Köhler.



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December | 15 years of commitment

## Prof. Rank bids farewell to the University Council



Prof. Ernst Rank is leaving the University Council of TU Dortmund University. As a chairperson, he has led the Council for three terms since its inception in 2007. As of 2023, he will not stand for another term. For a total of 15 years, Prof. Rank moderated the processes with a great deal of sensitivity and led numerous selection committees to prepare the election of Rector-

ate members. He was always available to offer advice and support, and kept an eye on the well-being of the university. First appointed to the then University of Dortmund in 1990, he always kept ties with TU Dortmund University, even after taking up the professorship for Computation in Engineering at the Technical University of Munich in 1997.

June | Association of Friends

## Chairperson of the GdF board re-elected

The Association of Friends of TU Dortmund University (GdF) re-elects Guido Baranowski (fifth from right) as its board chairperson. The former and long-standing managing director of the TechnologieZentrum Dortmund has held this position since 2016. A total of 15 GdF members are involved in the board. Mayor Thomas Westphal replaces his predecessor Ullrich Sierau on the board. Johann Jaeger (right) is elected as deputy chairperson and Wulf-Christian Ehrlich (third from left) as executive board member.



July | Rectorate

## Albrecht Ehlers begins third term in office

The University Council and Senate re-elected lawyer Albrecht Ehlers as chancellor by a large majority in late 2021. His third term of office begins in July and is set to last four years. As a member of the Rectorate, Ehlers has been in charge of administration at TU Dortmund University since 2010 and is committed to digitization, sustainability, start-up support and internationalization. He sees the implementation of the eGovernment Act (E-GovG), the structural modernization of the campus and the development of the Research Alliance Ruhr as central projects of his third term.



11 October | Obituary

## Mourning Professor Dr. Dr. h.c. Ulrich Bonse



Professor Dr. Dr. h.c. Ulrich Bonse, one of the founders and honorary senator of TU Dortmund University, dies at the age of 94. Ulrich Bonse came to the newly founded University of Dortmund in 1970. As the first Dean of Physics, he played a major role in shaping the structure of the university. He will be remembered as a special and highly valued personality.

30 October | Obituary

## Mourning for Professor and artist Martin Kaltwasser



Professor Martin Kaltwasser died unexpectedly at the age of only 57. His sudden death is a great loss to the Department of Arts and Physical Education and the university. Prof. Kaltwasser was a dedicated, inspiring university lecturer and artist who was extremely popular and valued among his colleagues and students.

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# IN THE CITY





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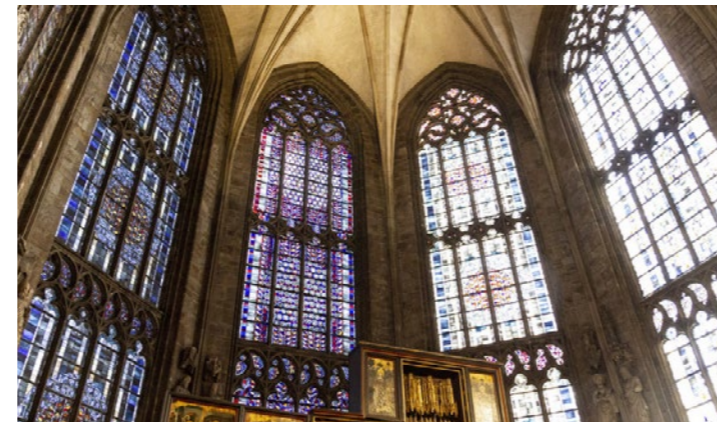
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Winter semester | Lecture series

## Images and sounds of war and peace

The public lecture series “Image and Sound” of TU Dortmund University in cooperation with the Dortmund City Archive and the St. Reinoldi City Church is dedicated to “Images and Sounds of War and Peace” in the 2022/23 winter semester. It is about better understanding the present in the mirror of historical memories and research, myths and stories, art and music and shaping it responsibly. TU Dortmund University brings the conversation between history, art and musicology to the city, turning the church into a lecture hall.



14 June | Science Conference

## A spotlight on demographic change



### 5. Dortmunder Wissenschaftskonferenz

“Connecting generations” is the motto of the fifth Dortmund Science Conference taking place in the Dortmunder U. Participants from TU Dortmund University include: President Prof. Manfred Bayer, Prof. Herbert Waldmann as representative of the Science Master Plan 2.0, Prof. Norbert Zmyj, Prof. Thomas Goll, Prof. Mona Motakef, Prof. Monika Reichert, Prof.

Michael Steinbrecher, Dr. Detlef Schiebold, and students. Prof. Martina Brandt from the Chair for Social Structure and Sociology of Ageing Societies not only helps shape the Science Conference, she is also a member of the speaker team for the new scientific competence field “Demographic Change” of the Science Master Plan 2.0.

27 May | DORTBUNT!

## A variety of contributions to the city festival



At the Dortmund city festival “DORTBUNT!”, TU Dortmund University presents itself with numerous contributions and hands-on activities from the areas of study, science, music and sport in the city center: Whether it’s student counseling on Hansaplatz, Children’s University in the Reinoldikirche or music on the Alter Markt – at the Cityfest, the public can experi-

ence what the university has to offer. At “Dortmund. Live”, there is also a 24-hour live stream from the Dortmunder U, where, among other things, the Center for Entrepreneurship & Transfer of TU Dortmund University organizes a start-up pitch. The iCapital campus is set up in front of the Dortmunder U, where the university is present via the German Rescue Robotics Center.

Winter and summer semester | Between Breakfast and Borussia

## Public lecture offers state-of-the-art physics for everyone

In 2022, TU Dortmund University’s entertaining lecture series “Saturdays Between Breakfast and Borussia – modern physics for everyone” also answers unusual physics questions for adults, children and young people: In the summer semester, the lectures explain what physics and life have to do with each other. The winter semester focuses on ultra-high vacuum, minerals in the earth’s interior, stellar remnants and low-temperature physics. All events can be attended on campus or streamed live online.



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August | Dortmund Dialog Prize

## Important inspiration for science and the city



The Social Research Center (sfs) of TU Dortmund University is honored for 75 years of social science research in Dortmund and its work with and in the city: Mayor Thomas Westphal (left) and Dr. Bettina Horster (right), Chairperson of the Board of Directors of the Society for the Promotion of Structural Change in Working Society (Gesellschaft zur Förderung des Strukturwandels in der Arbeitsgesellschaft), present the sfs Direc-

tor Prof. Jürgen Howaldt with the 2022 Dortmund Dialog Prize to an audience of more than 100 guests. The sfs was founded in 1946 and has been part of TU Dortmund University since 2007. In addition to national and international joint projects, the sfs also cooperates in its research with companies and public institutions in Dortmund and the surrounding area.

June | Lecture at Dortmunder U

## Linguist devoted to Ruhr German

Where do local phrases come from? How has Low German, especially Ruhr German, changed in recent years? The well-known linguist Dr. Georg Cornelissen from Bonn provides answers to these questions in an evening lecture in the Dortmunder U. The lecture takes place as part of the international conference of the Association for Low German Language Research, which is organized by the Department for Language, Literature and Culture at TU Dortmund University.

October | Art on site

## Public colloquium on the church in Bodelschwingh

In 1322, the church in Dortmund's Bodelschwingh district was consecrated to the Virgin Mary. An all-day event is held to mark the 700<sup>th</sup> anniversary of the cultural monument: The public colloquium of the series "ars ecclesia: art on site" is organized by the Department of Art and Material Culture of TU Dortmund University in cooperation with the parish in the church. The event series is held annually in different churches with changing partners.

Winter and summer semester | Children's University

## Children learn exciting things about science

In 2022, the Children's University at TU Dortmund University starts offering a broad program again with a variety of topics. The events are designed for children aged eight to twelve and teach them exciting things about science. They are held on campus or in the city center – for example, at the University Open Days in the Dortmunder U or in the Reinoldikirche. Children can choose from the four subject areas "Knowledge is Fun", "Sustainable Business", "Discovering Dortmund" and "Technology is Fun".



May | Trains of Thought

## Whitman quotes in Dortmund subways



As part of the TRAINS OF THOUGHT project, texts by the American author Walt Whitman entitled "Experiment Democracy" have been on display in Dortmund's subway trains since May. The project of the Faculty of Cultural Sciences with the transport company DSW21 wants to reflect the cultural diversity in the city, emphasize its cosmopolitanism and support the process

of urban integration. Prof. Walter Grünzweig and Dr. Julia Sattler from the Department of Cultural Studies selected the quotes along with students. In the subways, the texts can be read in German, Italian, Polish, Russian, Serbo-Croatian, Spanish and Turkish in addition to the original English.

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October | Lectures  
**Gambrinus Forum in the Industry Club**



The 26<sup>th</sup> Gambrinus Forum focuses on uncertainty and sustainability. TU Dortmund University invites the public to hear lectures by two renowned researchers in the Westphalian Industry Club. Legal scholar Prof. Gad Barzilai (second from left) from the University of Haifa, Israel, talks about how crises can affect politics and society. Philosopher Prof. Michael Quante

(left) from Münster gives a lecture on the “Era of Sustainability”. The Gambrinus program was initiated in 1993 by the Association of Dortmund Beer Brewers to mark the 700<sup>th</sup> anniversary of the city’s brewing rights. President Prof. Manfred Bayer (right) and Vice-Rector International Affairs Prof. Tessa Flatten (second from right) welcome the guests.

December | Project “Spotted in Dortmund”

**Art in downtown shop windows**

The seminar for art and art studies at TU Dortmund University starts the project “Spotted in Dortmund” (Geguckt in Dortmund) in collaboration with Qualitätsroute Dortmund e.V. Artistic photographs by TU student Allegra Hölftge can be seen in shop windows in the city. Under the title “House Views” she shows houses, whose display windows are often the only element perceived, and rarely their architectural design or the street space. The project is managed by Lena Dümer from Qualitätsroute and Prof. Barbara Welzel from TU Dortmund University.



September | DortmunderAutoTag

**Mobility trends of tomorrow**



On 8 September, the 17<sup>th</sup> DortmunderAutoTag, organized by the Institute of Control Theory and Systems Engineering of TU Dortmund University, takes place on the premises of the Dortmund Chamber of Industry and Commerce (IHK). Scientists from the university present their collaborative projects with automobile manufacturers and suppliers as well as publicly funded projects with which they conduct fundamental

and application-oriented research into the mobility of tomorrow. The focal points for 2022 are automated driving and electromobility as well as traffic planning and mobility transition. Companies and institutions, including BMW’s Dortmund brand and the Dortmund Chamber of Industry and Commerce, present themselves as main sponsors in a specialist exhibition.

August | LRK study

**Universities are “economic engines” for NRW**

Every euro that the state of North Rhine-Westphalia makes available to the 14 universities as basic funding generates – calculated conservatively – an added value of 4.01 euros, e.g. through procurement and wages, but also expenses from students, spin-offs or alumni. This is shown by the study “The Regional Economic Significance of the Universities in North Rhine-Westphalia”, commissioned by the State Rectors’ Conference (LRK). The LRK chairman Prof. Lambert T. Koch (left) presents the study to Ina Brandes (right), NRW Minister for Culture and Science.



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Exhibitions on the University Floor at Dortmunder U

CALED0

February–March: The exhibition is dedicated to the CALED0 research building – Center for Advanced Liquid-Phase Engineering Dortmund – which is being built on Campus North. It addresses both the architecture of the building and the research questions on the design of liquid phases, which are set to be covered there in the future.



#KunstBlumen (#ArtificialFlowers)

May–June: Young artists working in the fields of graphics, painting, photography and sculpture showcase a rich “garden” of different works. The program includes guided tours for International Museum Day and the DORTBUNT city festival as well as artist and curator talks on the “ExtraShift”, the Night of Industrial Culture.



Art Tour

July: The exhibition showcases outstanding works by art students. The 2022 art prizes go to: Zoe Henzler (photography), Pia Austermann (graphics), Aaron Schmidtke (painting), Emma Beke Bandmann (plastic) and Henrike Herzig (edition prize).



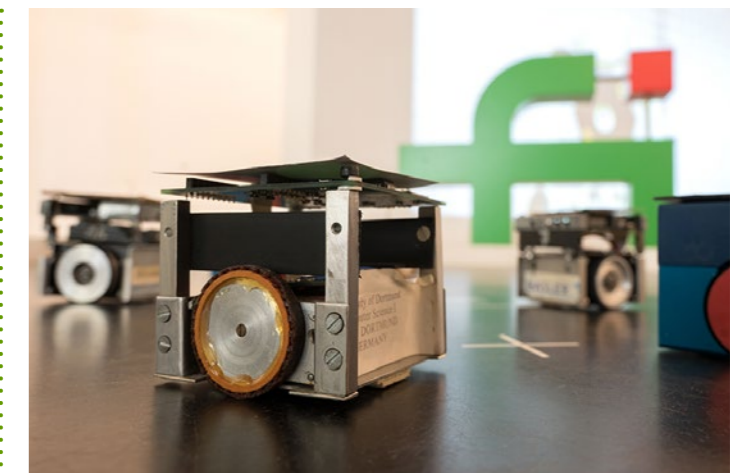
The Khanenko Museum | Kyiv

August–September: Photos of a major art museum in Kyiv show the halls emptied in spring 2022. The Seminar for Art and Art Studies at TU Dortmund University curated the exhibition alongside the “Bohdan and Varvara Khanenko National Museum of Arts”.



TABULA PICTA LOREM IPSUM

October: In their works, art students deal with the changing understanding of painting – an art form where analogue and digital image formats influence and mix in many ways today.

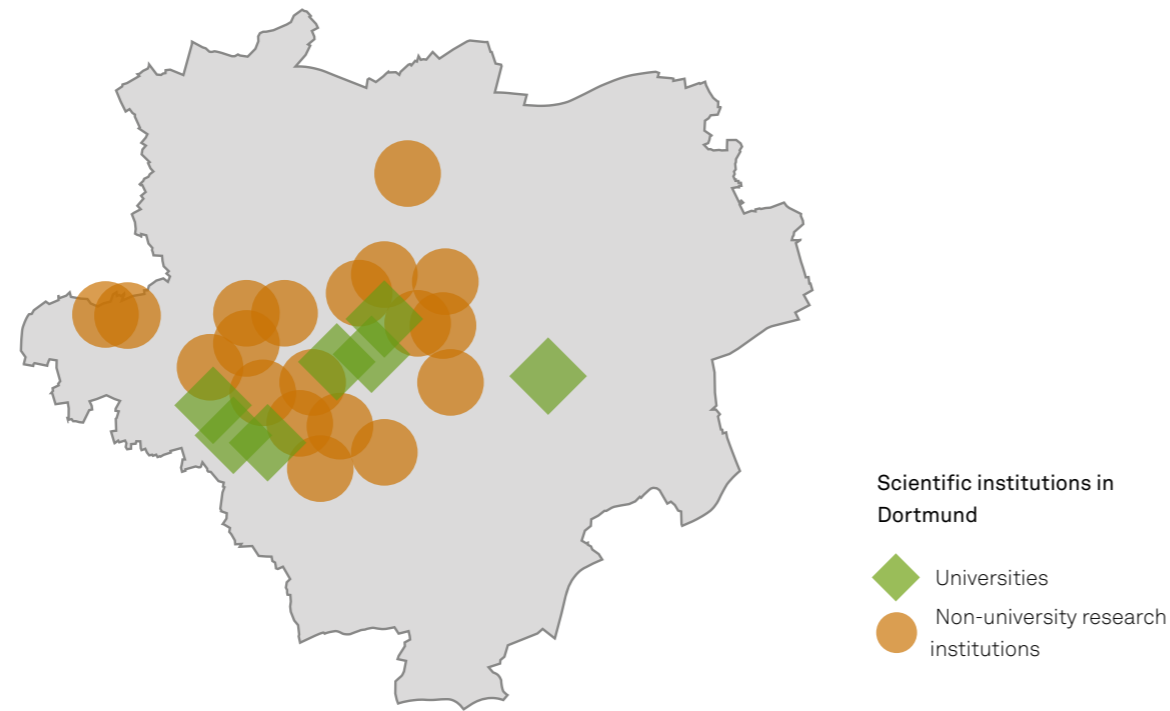


50 years of computer science

November–January: 30 exhibits tell the history of the Department of Computer Science from 1972 to the present day and explain, among other things, to what extent TU Dortmund University helped shape the origins of the internet in Germany. With the help of punch cards, calculators and modern research objects, visitors get to know computer science and experience modern branches, such as artificial intelligence, in an interactive way.

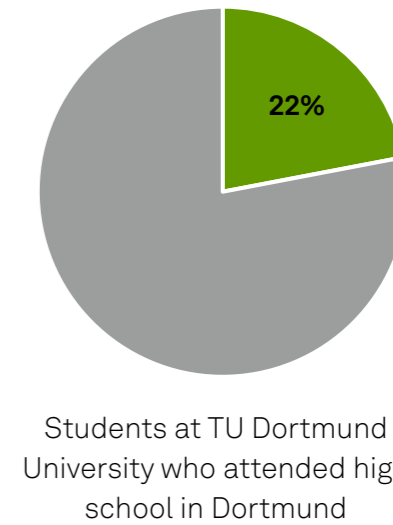
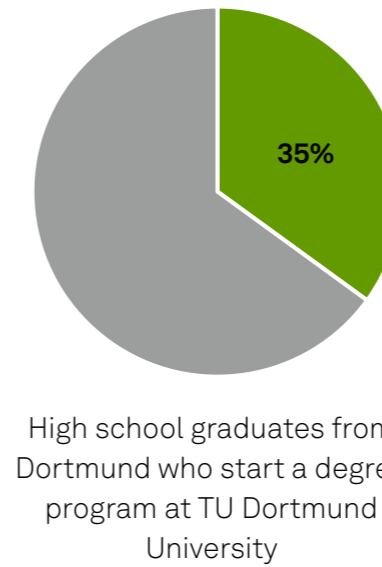


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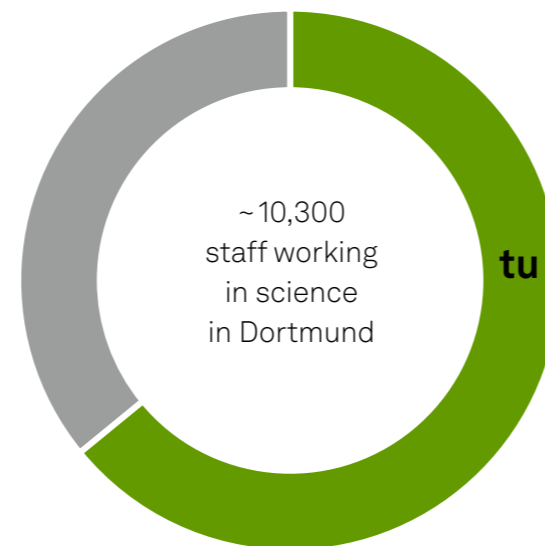
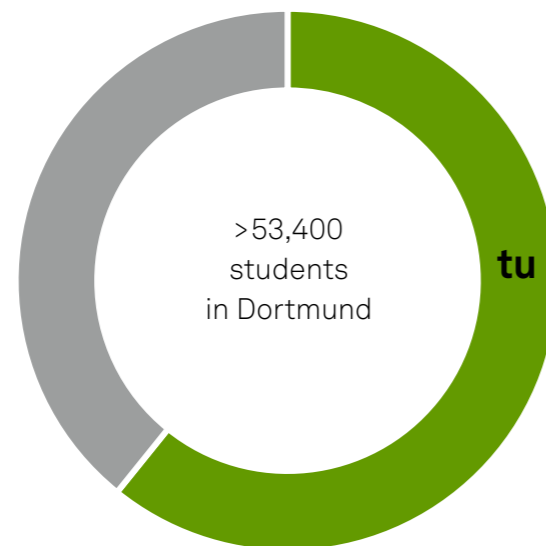
### Dortmund as Science City

Dortmund is a science city with seven universities and around 20 non-university research institutions. In 2013, science, business and urban society joined forces in the Masterplan Science and have since pursued the goal together of positioning Dortmund even more strongly as a place for science and research.



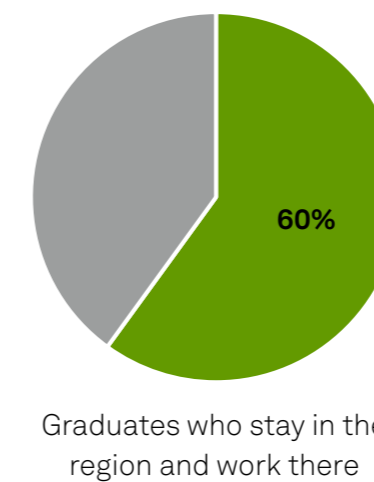
### Popular Among High School Graduates from Dortmund

Over a third of all high school graduates from Dortmund choose to study at TU Dortmund University. A total of 22 percent of all TU students graduated from high school in Dortmund.



### TU Dortmund University – The City’s Largest Scientific Institution

More than 53,400 students are enrolled at the seven universities in Dortmund. That is more than in Heidelberg. Almost two thirds of them study at TU Dortmund University. The universities and scientific institutions in the city employ about 10,300 people, around 60 percent work at TU Dortmund University.



### Many Graduates Stay in the Region

Around 4,000 students graduate from TU Dortmund University each year. Around 60 percent then stay in the region and work there, as a graduate study by TU Dortmund University shows.

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**Further information and sources**

Further extensive statistical information can be found in the two publications “Data & Facts” and “Student Statistics”, which are published by the Statistics division of the Department of University Development and Organization at TU Dortmund University.

**Links to further information:**

[www.tu-dortmund.de/universitaet/infomaterial-und-downloads/](http://www.tu-dortmund.de/universitaet/infomaterial-und-downloads/)  
[www.service.tu-dortmund.de/group/intra/studierendenstatistiken](http://www.service.tu-dortmund.de/group/intra/studierendenstatistiken)

**Order print copy:** [statistik.dezernat2@tu-dortmund.de](mailto:statistik.dezernat2@tu-dortmund.de)



Most of the data published here is collected by TU Dortmund University itself. Please note: The graduate figures are provisional, as of: Juni 2023 (page 22, right).

**Other sources are:**

- Page 33: University Alliance Ruhr, coordination
- Page 48, bottom left: „The Student Survey in Germany“ (2021), own calculation with weighted data
- Page 69, bottom left: City of Dortmund, Office for Affairs of the Mayor and the Council
- Page 69, top right: among others, City of Dortmund, Dortmund Statistics Office, average of the last five Abitur years
- Page 69, bottom right: Graduate surveys of TU Dortmund University in the Collaborative Graduate Studies Project (KOAB), carried out by the International Center for Higher Education Research (INCHER-Kassel), examination years 2010 to 2020

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