EXPERIENCE THE FUTURE – FOR CHILDREN, TEENAGERS, **AND CAREER STARTERS**

Research rally

Children and teenagers can discover science on campus on their own. Follow to find your way!

Experiments for budding young scientists in the institutes

All suitable experiments are listed on information panels in front of the buildings.

JuLab Schools Laboratory and eXploregio.net

Hands-on experiments promise lots to learn and discover for young and old alike. (Building 04.11) Come and join us! JuLab

Your future career starts here - what's on offer for young talent

Discover vocational training, university programmes, and career paths. (Buildings 04.7 and 04.11)

Lakeside stage

Be there for our science and experiment shows!

IMPORTANT INFORMATION

No registration is needed for Open Day.



No cars are allowed on campus on Open Day, (Exception: accessible narking



stay at home



Cyclists are very welcome on



Free shuttle buses will run from 09:30 at regular intervals from various car parks in Jülich and the surrounding area to the main entrance (P1-P6, P12 & P13) or to the Hambach gate (P7-P11). The last shuttle bus is at 17:15.



Extra trains will service the RB 21 Rurtalbahn train line (train tickets required), running between the train stations in Düren or Linnich and the "Forschungszentrum" stop. Either walk from here (approx. 15 mins) or take one of the free shuttle buses to the main entrance of Forschungszentrum Jülich.

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Wheelchairs are available from the representatives for persons with disabilities (in front of building 15.3).

WE LOVE RESEARCH!

Do you share our enthusiasm for new things, for the exciting puzzles that nature presents us with, for discovering the smallest particles, and for developing big machines? What does groundbreaking research for a better future look like?

• Hydrogen as an example: What can this energy carrier actually do? How can it be produced in a climate-neutral way and where can it be used?

 The computing power of the future: What do the most powerful computers in the world calculate? How does a quantum computer work? What are computer scientists copying from the human brain?

· Climate change: How is the circular bioeconomy helping us to conserve resources? How can crops be made more resistant to increasing drought and aridity?

At Forschungszentrum Jülich, we are solving tomorrow's questions today - together with strong regional, national, and European partners and in various networks. We make our research results ready for use in society, politics, and industry. We work closely with partners in industry so that our insights can be used to create new products or services that improve people's lives.

Visit our campus on Open Day and see our scientists in action. At the end of the day, you might just find yourself saying: we love research!

Jülich 44 L 136 Kölner Lands Stetternick eo-Brandt-Str JÜLICH Kirchberg Aldi Süd, Zentrale P6 Aldi Sud, Margaretenstr. 16 Berufsausbildung. Leo-Brandt-Str 1 Mechatronikzentrum Kaufland Jülich, P_ Bundeswehr, An der Leimkaul 1 Wilhelm-Johnen-Str. 1 P11 Tagebau Hambach, Am Tagebau, P2 Technologiezentrum Pa Fachhochschule, Jülich, Karl-Heinz-Heinrich-Beckurts-Str. 13 Mußmann-Str. 1 Niederzier Aldi Süd, Rudolf-Diesel-Str. 2 S-Bahn Station EDEKA Geldermann, P₉ IP. Am Alten Bahnhof, Merzenich Aldenhoven Obererz 1 EDEKA Neue Mit-P5 REWE-Warns, Margaretenstr. 12 ALDI and Netto, te. Niederzierer Am Alten Bahnhof 5-7 Str. 86, Niederzier Aldenhoven

POWERFUL COMPUTERS FOR RELIABLE AI

Artificial intelligence is already revolutionizing many areas of life. As one of the leading AI hotspots in Europe, we research with and on Al here at Forschungszentrum Jülich. We develop new, reliable Al models and are already exploiting its potential to solve complex problems.

Our scientists work on large AI models for images and language like OpenGPT-X, they refine AI models, and they verify that these are secure and reliable. Machine learning, for example, helps us to improve medical diagnostics, develop new climate models, and optimize materials for photovoltaics. Understanding the brain, weather forecasting, and analysing visitor flows at large events can be improved and accelerated using AI. A decisive basis for training complex Al algorithms and using them: our powerful supercomputers.

A central role will be played here by the JUPITER supercomputer. It is as powerful as a million modern smartphones and is one of the most powerful AI machines in the world.

Visit our AI campus and immerse yourself in the world of AI research at Jülich. Discover the many applications of artificial intelligence and take a look at the impressive machines we use to compute.

Download the Open Day 2025 app today (campus map, real-time navigation, information on the event, and push notifications on highlights)







10:00 to 17:00



In cooperation with WDR 5

will be denied access to the campus. Images and videos will be recorded at the event and may be used for public relations.

Larger bags and backpacks will be

searched at the campus entrances.

Anyone carrying dangerous objects

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The collection point for lost people and lost property is at the visitors reception at the main entrance.

maps, and on the internet: www.tagderneugier.de/en or www.fz-juelich.de/en. Forschungszentrum Jülich, Corporate Communications,

First aid/emergency services:

Ĭ Further information is available at our information stands, on campus

tel: 02461 61-2121, email: tagderneugier@fz-juelich.de,

in 📀

02461 61-77



LAKESIDE STAGE **PROGRAMME**

The programme will be hosted by Esther Brandt and Johannes Döbbelt.

10:00 Pés Quentes - Samba percussion from Düren Drums, dancing, and a great atmosphere

10:15 Open Day - An overview What's happening where?

11:15 Paradise At Midnight

10:30 Pés Quentes - Samba percussion from Düren Drums, dancing, and a great atmosphere

10:45 Baff! Science comedy Interactive experiments that will see you laugh, marvel, and learn

with Felix Homann

Energetic live music 12:00 Al against the audience

Who is cleverer? The science quiz show with Sascha Ott

12:30 Welcome address Prof. Dr. Astrid Lambrecht Chair of the Board of Directors of Forschungszentrum Jülich

13:00 Baff! Science comedy Interactive experiments that will see you laugh, marvel, and learn with Felix Homann

13:30 Al against the audience Who is cleverer? The science quiz show with Sascha Ott

14:00 Paradise At Midnight

Energetic live music

14:30 Al campus

Take a look: artificial intelligence up close

14:45 Baff! Science comedy

Interactive experiments that will see you laugh, marvel, and learn with Felix Homann

15:15 Pés Quentes – Samba percussion from Düren Drums, dancing, and a great atmosphere

15:30 Al against the audience Who is cleverer? The science guiz show with Sascha Ott

16:15 Paradise At Midnight

Energetic live music

17:00 End of stage programme





ENVIRONMENT AND CLIMATE

- **05.6 Hot times: understanding the changing atmosphere** Troposphere (ICE-3)
- **05.6 How greenhouse gases are distributed globally** Stratosphere (ICE-4)
- 06.2/ How plants are changing
- 06.4/ Plant Sciences (IBG-2) Bioeconomy Science Center (BioSC) BioökonomieREVIER (BÖR)
- **15.4** Robotic development assistants for the lab ... and ACTION! Biotechnology (IBG-1)
- **15.8** Molecular bioinformatics: from the gene to the material Bioinformatics (IBG-4)) Computational Metagenomics (IBG-5)
- **15.13 Can chemistry tell left from right?** Bioorganic Chemistry (IBOC)
- 15.21 Enzymes@Work Biotech hands-on Molecular Enzyme Technology (IMET)
- **16.6** Healthy soil the basis of life for all! Agrosphere (IBG-3)

ENERGY AND SUSTAINABILITY

- **01.3** Innovative materials for the energy transition Materials Synthesis and Processing (IMD-2)
- **02.16** Photovoltaics: see it, feel it, and try it! Photovoltaics (IMD-3)
- 03.1 Engineering for excellent science Institute of Technology and Engineering (ITE)
- **03.2** What opportunities does green hydrogen offer Africa? Jülich Systems Analysis (ICE-2)

- **03.2** Hydrogen and chemicals with renewable energy Electrochemical Process Engineering (IET-4)
- 04.3 The mystery of our existence questions for particle physics Nuclear Physics (IKP)
- **04.7** Hydrogen moves the world hop on! Corporate Development (UE)
- **04.7** Fully charged the batteries of the future lonics in Energy Storage (IMD-4/MI MS)
- **04.7** New hydrogen technologies for the Rhenish mining area Sustainable Hydrogen Economy (INW)
- 04.7 Smart energy systems of the future (K) Energy Systems Engineering (ICE-1)
- 04.19 Cleverly connected: our energy campus Intelligent Campus (TB-X)
- 04.19 Our contribution to a sustainable future Strategy and Sustainability (UE-S)
- 10.14 Fusion as the energy of the future: the power plant of the stars Plasma Physics (IFN-1)
- **10.22 Energy and the future** Fundamental Electrochemistry (IET-1)
- **14.6** A net-zero future with theory, simulations & AI (®) Theory and Computation of Energy Materials (IET-3)

FUTURE IT

- **02.14** Small structures large laboratory Helmholtz Nano Facility (HNF)
- 04.6 Is the brain better than a computer? Al in hardware (K) Computational and Systems Neuroscience (IAS-6) Peter Grünberg Institute (PGI) Integrated Computing Architectures (ICA)

- 04.7 What does data competence have to do with my everyday life? Materials Data Science and Informatics (IAS-9)
- **04.8** Supercomputer seeks supermaterials Quantum Theory of Materials (PGI-1)
- 04.8 Quantum check how we compute Peter Grünberg Institute (PGI) Integrated Computing Architectures (ICA)
- 04.8 Making the invisible visible Neutron Scattering and Soft Matter (JCNS-1)
- 04.8 Scattered intelligence: discovering hidden patterns Quantum Materials and Collective Phenomena (JCNS-2)
- 05.2 Nano meets nosiness electrons reveal the invisible Ernst Ruska-Centre, Physics of Nanoscale Systems (ER-C)
- **05.11** Al research: introduction and applications (M) Data Analytics and Machine Learning (IAS-8)
- **15.22** From natural to artificial intelligence (K) Computational and Systems Neuroscience (IAS-6)
- **16.4** Supercomputing is the future Al, exascale, quanta (K) Jülich Supercomputing Centre (JSC)

BRAIN RESEARCH

- **15.2** The miracle in your head: structure and function of the brain (1) Structural and Functional Organization of the Brain (1NM-1)
- **15.2 The brain in action!** (6) Cognitive Neuroscience (INM-3)
- 15.2 What your brain reveals about you Brain and Behaviour (INM-7)

15.14	Physical innovations in brain research (K) Medical Imaging Physics (INM-4)
15.16	A look inside the brain – how and why? Molecular Organization of the Brain (INM-2) JARA Institute Brain structure-function relationships (INM-10)
15.16	Radiant spies in the jungle of the brain Nuclear Chemistry (INM-5)
16.15	Protein playhouse: simulations, medicine, and Al 🔞 Computational Biomedicine (INM-9)
	FOSTERING TALENT - LAUNCHING CAREERS
04.7	Career at FZJ – join our team! Human Resources – Human Resource Development and Recruiting (P-E)
04.11	Experience science – help shape the future JuLab Schools Laboratory (SL)
04.11	Start your vocational training or dual study programme with us! Vocational Training Centre (P-Z)
	LOCATION
04.1	A good meal before the research tour! Seecasino (M-SV)
04.3	Radiation, society, and environment Safety and Radiation Protection (GS)
04.7	Research café and photo exhibition Dialogue/interaction in the Central Library (ZB)
04.7	Publications – the currency of science 🕅 Central Library (ZB)
04.7	Information on the rainbow network Equal Opportunities Bureau (BfC)
09.2	Afraid of heights? AVR reactor: dismantling up close Jülicher Entsorgungsgesellschaft für Nuklearanlagen mbH (JEN)
12.11	The world of the Works Fire Brigade Works Fire Brigade (S-F)
14.5	Graphical Media – on campus; close to research Purchasing and Materials – Campus Service (M-S)
15.3	Representation for persons with disabilities fostering inclusion Representatives for persons with disabilities (SBV)
15.3	How project funding makes bold ideas bigger Project Management Jülich (PtJ)
15.21	New laboratories and office space Planning and Building Services – Electrical Engineering (B-E)
16.15	Fun and games for children Sports Association (BSG)
	AI HANDS-ON KI
S	Learn, discover, and discuss on our Al campus:
	 Al on stage, an entertaining programme featuring Jülich scientists
	 Future computing made in Jülich with our interactive exhibit "CUPITER"
CAMPL	 Insights into AI applications and research in our institutes Hands-on AI for all ages
4	Examples here include:
0	Al in action: crowds and fire dynamics Civil Safety Research (IAS-7)
4	Active matter and artificial intelligence Theoretical Physics of Living Matter (IAS-2)
	Al in early-childhood education The Kleine Füchse daycare centre