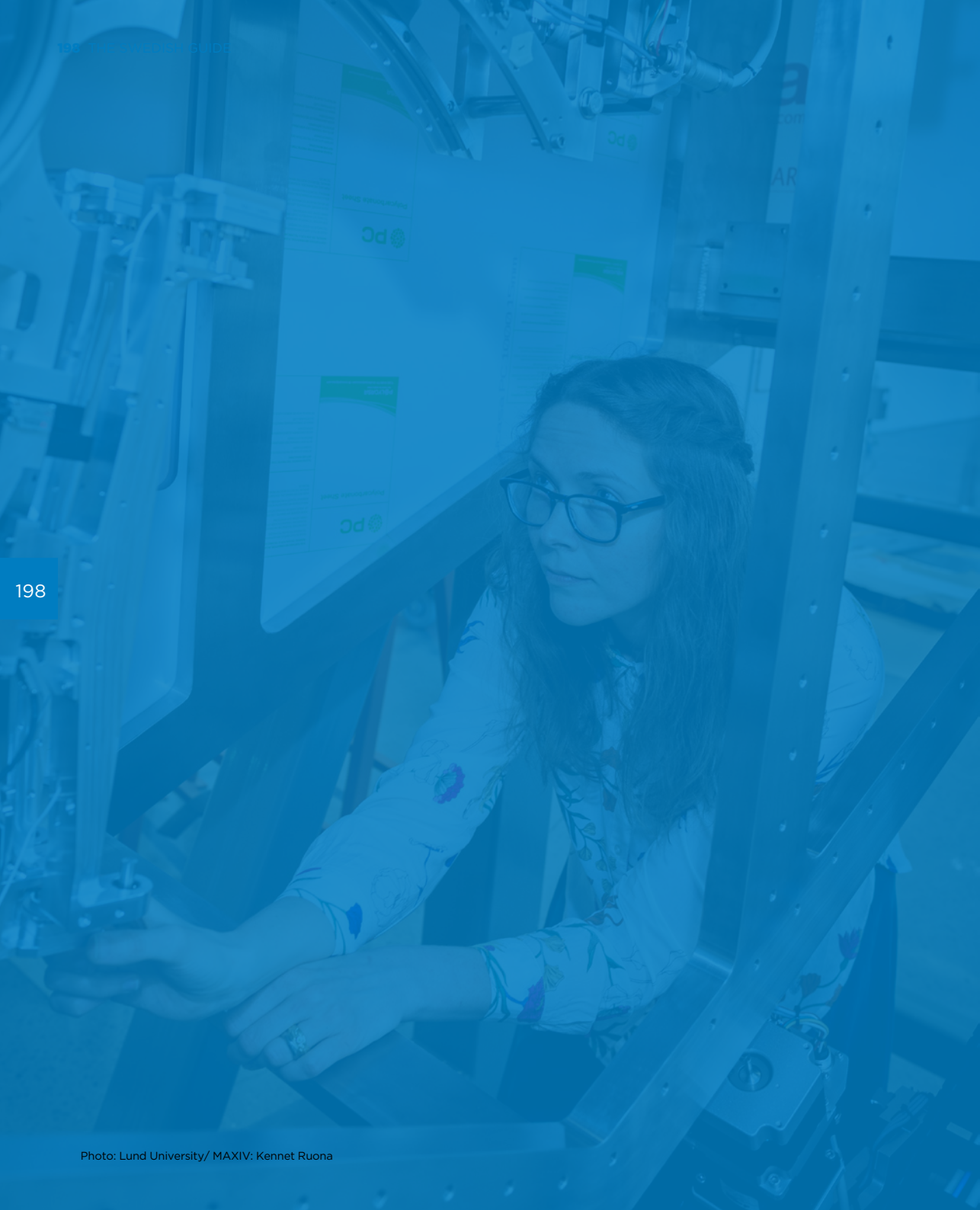


UNIVERSITIES & INSTITUTES

197



2024



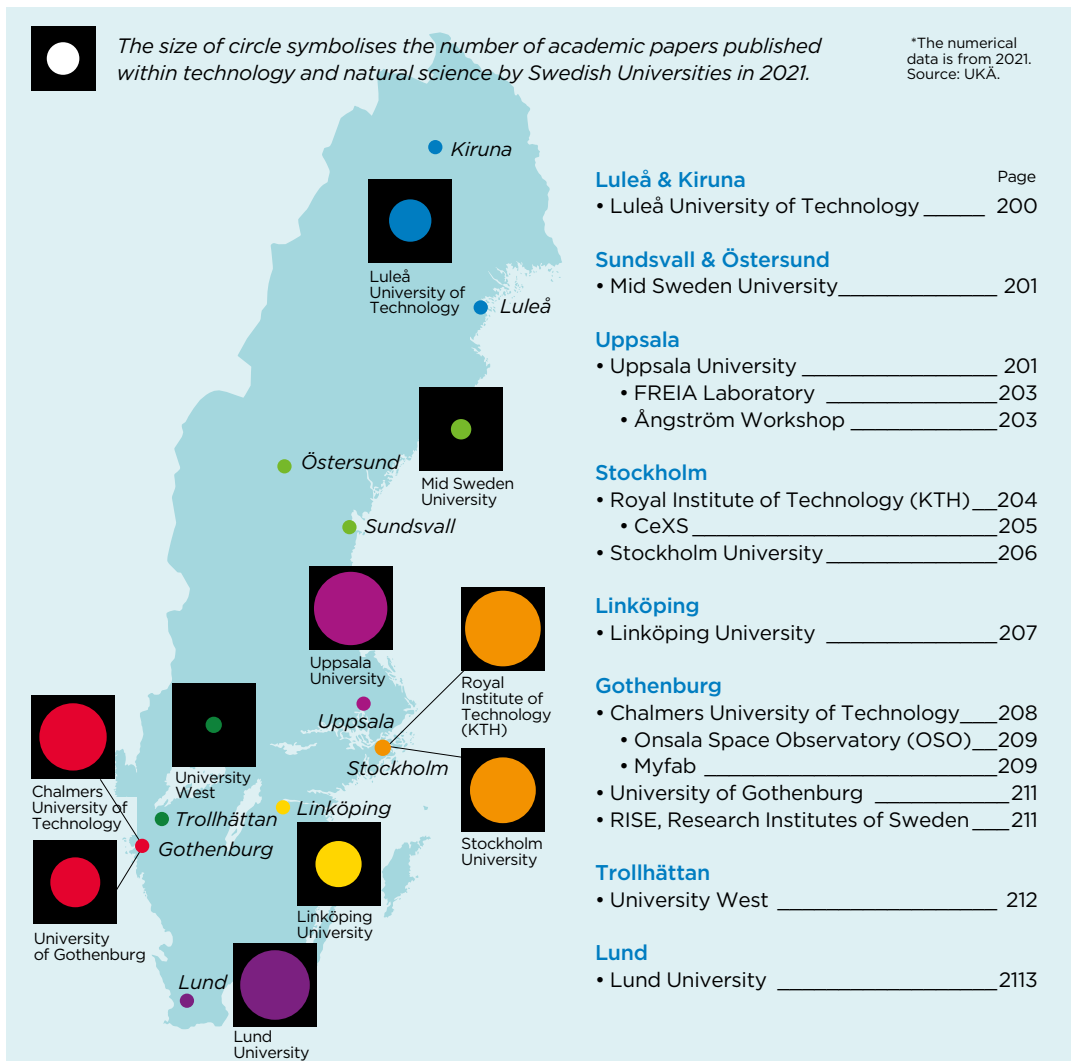
UNIVERSITIES & INSTITUTES

Sweden has a multitude of universities, from the very north to the very south of the country, representing a range of internationally highly competitive competencies within areas related to Big Science.

Research is not just a part, but a cornerstone of higher education in Sweden. Compared to the rest of the OECD countries, a significant

portion of the universities' funding is allocated to research and development. The number of employees active in research is growing and has done so for a number of years, shaping the Swedish educational system.

On the following pages, we present a selection of the universities, highlighting some of their capabilities*.



LULEÅ UNIVERSITY OF TECHNOLOGY (LTU)

LULEÅ AND SPACE CAMPUS IN KIRUNA

Luleå University of Technology, LTU, has extensive expertise in developing novel materials for use in extreme environments, and delivers solutions in materials science, artificial intelligence, and remote handling to Big Science facilities.

LTU is, e.g. the host of LUMIA (Luleå Material Imaging and Analysis Laboratory), which offers advanced material analysis in 2D/3D/4D to industry as well as academia.

The university's AI and remote handling expertise involves developing advanced robotics and automation for use in inaccessible or hazardous environments. LTU is deeply involved in space research and works closely with the Institute for Space Physics (IRF) and EISCAT at the LTU Space Campus site in Kiruna.

BiSS is particularly impressed by the delivery of:

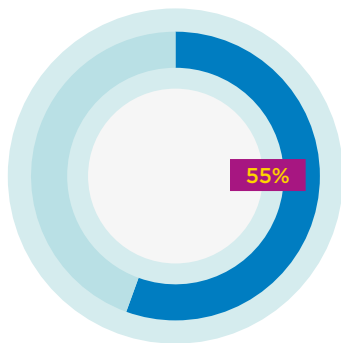
- EISCAT: 3D Design of Antenna Elements
- MAX IV: Test environment for synchrotron facility
- CERN: Pre-study on development of advanced composite robotic arms
- FAIR/GSI: Use of AR/VR in highly radioactive hot-cell environments

At a glance

Located in northern Sweden, this young-spirited university is focused on technology and engineering and emphasises collaborations with industry to drive innovation and applied research. LTU is renowned for its cutting-edge research in materials science, robotics, artificial intelligence, and environmental engineering. Founded in 1971, LTU has approximately 17,900 students and 1,000 researchers.

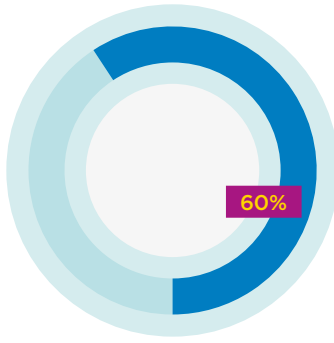
www.ltu.se/en

“Represents an extensive experience in industry collaborations.”



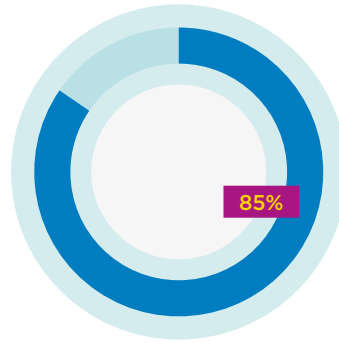
Research funding as proportion of total revenue

Out of its total revenue of almost EUR 175 million, Luleå University of Technology allocates more than 55 percent, EUR 100 million, to research.



Employees with a research assignment

Of the more than 1,700 employees at Luleå University of Technology, around 1,000, 60 percent, have research assignments.



Academic papers within technology and natural science

Around 1,000, 85 percent, of the almost 1,200 publications from Luleå University of Technology in scientific journals were within the fields of technology and natural science.



MID SWEDEN UNIVERSITY

SUNDSVALL AND ÖSTERSUND

Mid Sweden University's specialisation in areas such as autonomous sensor systems, advanced materials, photonics, and communication systems is interesting from a Big Science perspective. The university's research groups have experience developing sensor-based systems for radiation detection and imaging, among other things.

BiSS is particularly impressed by the delivery of:

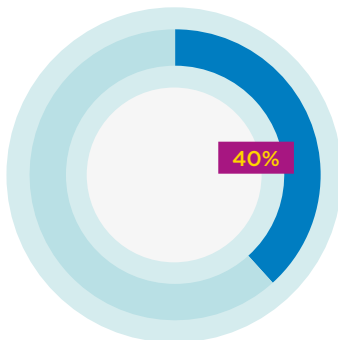
- CERN: Contribution to The MIDIPIX Collaboration, readout electronics for single photon processing pixel detectors
- CERN: Contribution to additive manufacturing for fabrication of 316L-grade components (in collaboration with Chalmers)
- ESS: Participation in the Brightness, i.a. pixel detectors for high-resolution neutron imaging

At a glance

Mid Sweden University, also known as Mittuniversitetet, has a long history in higher education and was given university status in 2005. It is known for its strong focus on research and close connections with industry and other academic institutions to ensure that its research has practical applications and contributes to societal development. It hosts 13,000 students and 550 researchers.

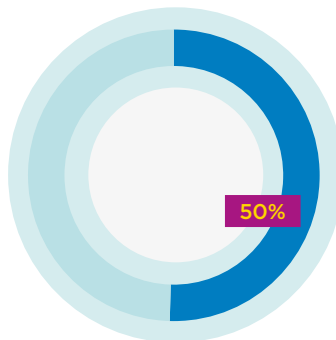
www.miun.se/en

“Young-spirited university, with expertise in, e.g. autonomous sensor systems, photonics, and communication systems.”



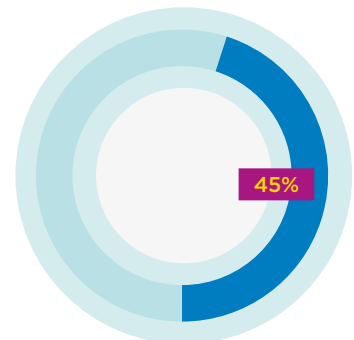
Research funding as proportion of total revenue

Out of its total revenue of almost EUR 100 million, Mid Sweden University allocates almost 40 percent, EUR 40 million, to research.



Employees with a research assignment

Of the more than 1,100 employees at Mid Sweden University, around 550, 50 percent, have research assignments.



Academic papers within technology and natural science

More than 240, around 45 percent, of the almost 500 publications from Mid Sweden University in scientific journals were within the fields of technology and natural science.

UPPSALA UNIVERSITY

UPPSALA



UPPSALA
UNIVERSITET

Uppsala University has a long history of development of scientific instruments and components for research facilities. It has state-of-the-art expertise in development and testing of accelerator components, development of components for particle detectors, development of diagnostics tools for neutrons, development of instrumentation for material research, as well as instrumentation for optical telescopes.

Uppsala University is host to the FREIA Laboratory and the Ångström Mechanical Workshop. It also hosts one of the nodes in the national nanofabrication network Myfab.

BiSS is particularly impressed by the delivery of:

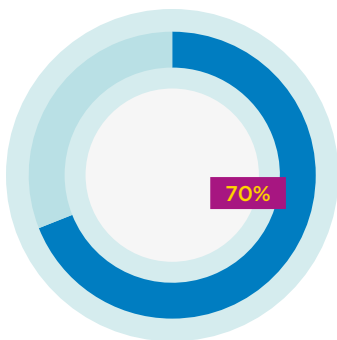
- CERN: Silicon Detector Modules for the ATLAS Experiment
- ESO: Development of ANDES and MOSAIC Instrumentation for the ELT
- FAIR: Electromagnetic Calorimeter for the PANDA Experiment
- ILL: The Super ADAM Instrument
- MAX IV: The Veritas beamline
- XFEL: NIR Spectrometer
- ITER: Neutron diagnostics for fusion power plants
- IceCube: Development for the IceCube neutrino experiment in Antarctica

At a glance

Founded in 1477 the oldest and largest university in the Nordic countries, renowned for strong research in social sciences, medicine, technology, and natural sciences. Uppsala University hosts 50,000 students and 5,000 researchers.

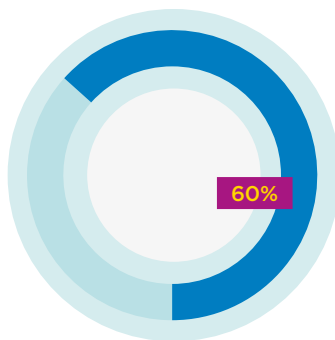
www.uu.se/en

“One of few universities in Sweden with research in all areas of Big Science.”



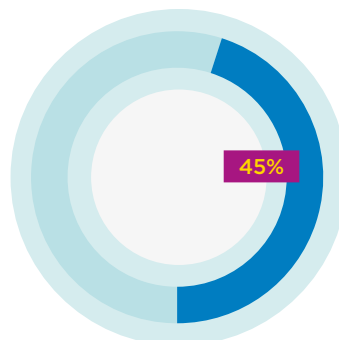
Research funding as proportion of total revenue

Out of its total revenue of more than EUR 700 million, Uppsala University allocates almost 70 percent, EUR 500 million, to research.



Employees with a research assignment

Of the 8,300 employees at Uppsala University, more than 5,000, 60 percent, have research assignments.



Academic papers within technology and natural science

More than 3,000, around 45 percent, of the more than 6,600 publications from Uppsala University in scientific journals were within the fields of technology and natural science.



UPPSALA
UNIVERSITET

FREIA Laboratory hosted by Uppsala University

The FREIA Laboratory at Uppsala University, also known as the Facility for Research Instrumentation and Accelerator Development, is a state-of-the-art scientific laboratory for accelerator research, development and testing, as well as instrumentation development. The lab hosts several cryostatic systems for testing superconductive equipment, as well as a radiofrequency source for microwaves for testing accelerator cavities.

Developing accelerator components

The staff at FREIA has world-class expertise in areas such as accelerator cavities and magnets, energy-efficient microwave power amplifiers, diagnostics, sensors and measurement techniques for accelerators.

The FREIA Laboratory has contributed to developing accelerator components and instruments for basic research for several national and international research infrastructures.

Established in 2011, it is located at the Ångström Laboratory.

BiSS is particularly impressed by the delivery of:

- ESS: Solid State Power Amplifier – development of the next 400 kW power station
- CERN: Development of superconducting Canted Cosine Theta magnet prototype
- CERN: Quench Study and RF Characterization of Crab Cavities
- CERN: Testing of Superconducting Orbit Corrector Dipole Magnets
- ESS: Acceptance Tests of Cryo Modules
- ESS: Test of High Voltage Pulse Modulator
- ESS: Testing tetrode 352 MHz radiofrequency power source

www.uu.se/en/department/physics-and-astronomy/infrastructure/freia-laboratory

“A unique environment for accelerator testing and development.”

Ångström Workshop hosted by Uppsala University

The Ångström Workshop at Uppsala University is a large and modern mechanical workshop, unique in its kind in the academic sector in Sweden.

The workshop contributes to instrument development and fabricates prototypes for research groups at Uppsala University and other Swedish universities and national and international research infrastructures. The workshop staff has long experience in producing and modifying equipment, providing support for technical issues, and aiding with outsourcing and materials purchases.

The Ångström Workshop can handle fine mechanical works with small tolerances and welding of most materials, especially stainless steel (UHV-compatible). It operates nine directed

CNC millers, two directed CNC lathes, and works with many different materials, e.g. stainless steel, aluminum, brass, copper, ceramics, and various plastics.

BiSS is particularly impressed by the delivery of:

- CERN: Superconducting Cables Connection Cryostats (Cold Boxes).

www.uu.se/institution/fysik-och-astronomi/infrastruktur/angstrom-verkstad

“Sweden’s largest academic mechanical workshop.”



ROYAL INSTITUTE OF TECHNOLOGY (KTH)

STOCKHOLM

KTH conducts both basic and applied research relevant to Big Science, and its research structures enable interdisciplinary and external collaboration.

KTH is, e.g. involved in developing methods and instrumentation for neutron and synchrotron facilities. KTH fusion energy group is gathering expertise and collaborating with companies in fusion energy, exploring new technology to stabilise fusion plasma.

The experimental particle physics group at KTH is active at the frontline of Hadron Collider physics and has been contributing to the ATLAS experiment at CERN LHC since 1990. The experimental nuclear physics group carries out cutting-edge research in accelerator-based subatomic physics.

BiSS is particularly impressed by the delivery of:

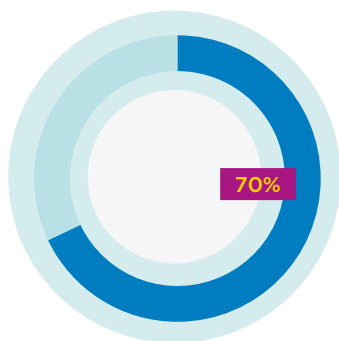
- ITER: Fusion reactor development, plasma-wall interactions in fusion devices
- XFEL: Heat load investigations on diffractive optics: fabrication of "zone plate" nanostructures on diamond substrate, simulations of heat transport, design of cooling systems, and heat load tests with beam
- ITER: Modelling of plasma-surface interactions
- CERN: Development of new High-Gravity Timing Detector for HL-LHC
- FAIR: Development of instrumentation for AGATA and MUSTAR

At a glance

Founded in 1827, KTH is Sweden's largest and one of Europe's leading technical universities offering a wide range of research in engineering and technology, including digitalisation, industrial transformation and material science. KTH has several specialised research centres and laboratories that support experimental research in quantum physics, photonics, and nanophysics. Hosts 17,000 students and 3,000 researchers.

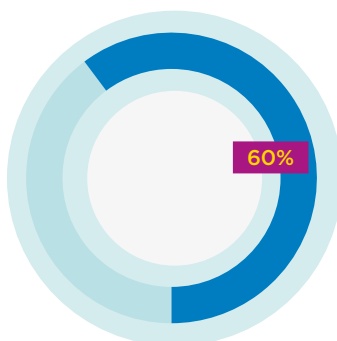
www.kth.se/en

"A driving force for interdisciplinary research and external collaborations."



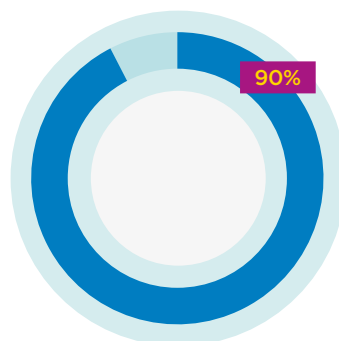
Research funding as proportion of total revenue

Out of its total revenue of almost EUR 500 million, KTH allocates almost 70 percent, EUR 330 million, to research.



Employees with a research assignment

Of the almost 5,000 employees at KTH, 3,000, 60 percent, have research assignments.



Academic papers within technology and natural science

More than 3,200, 92 percent, of the almost 3,500 publications from KTH in scientific journals were within the fields of technology and natural science.



Center for X-rays in Swedish Materials Science, hosted by KTH

Center for X-rays in Swedish Materials Science (CeXS) is a research centre hosted by KTH Royal Institute of Technology.

CeXS focuses on the use of high-energy X-rays in materials research and development.

CeXS serves as the academic host for the Swedish Materials Science beamline at PETRA III at Deutsches Elektronen-Synchrotron (DESY), for Swedish universities, research organisations, and companies, allowing them to conduct advanced materials science research. This includes operational developments and upgrade planning.

CeXS also undertakes infrastructure development projects (hardware and methods) to enable novel research and streamline standard experiments.

BiSS is particularly impressed by the delivery of:

- DESY: Development of the EH2, roll-in experimental hutch at P21.2 to enable heavy-load sample environments (heavy-duty hexapod) and ultra-rapid measurements (fast Eiger detectors and detector portal)
- DESY: Development of the zoom-in/zoom-out bulk x-ray nanoscale microscope at the coming PETRA IV synchrotron source
- DESY: Development of laser and electron beam experimental platform at P21.2

www.cexs.kth.se

“Safeguards Swedish interests at the PETRA III.”

STOCKHOLM UNIVERSITY

STOCKHOLM

Stockholm University (SU) is a large university with excellent research groups within a range of areas, including astrophysics, ion physics and material science.

The university has experience and expertise in developing scientific instruments for optical and solar telescopes, as well as for detectors and components for accelerator systems for particle, atomic, ion, and molecular physics.

The university hosts the DESIREE ion-beam storage ring to study ion-ion interactions, the Institute for Solar Physics, and a nanofabrication facility connected to the national Myfab network.

BiSS is particularly impressed by the delivery of:

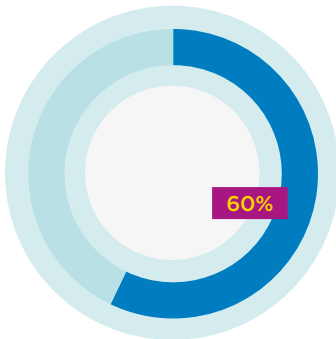
- XFEL: Temperature measurement system for undulators
- XFEL: Characterization and fiducilization of undulator quadrupoles
- XFEL: Dosimetry, damage and mitigation strategies for the undulator systems
- ESO: Development work for ANDES and MOSAIC instruments
- IceCube: Calibration system for the neutrino experiment in Antarctica (in collaboration with UU)
- CERN: Readout electronics for the hadronic calorimeter and calorimeter trigger of the ATLAS experiment
- CERN: Additive manufacturing for fabrication of 316L-grade components (in collaboration with Chalmers)
- Swedish Solar Telescope: Design and characterisation

At a glance

Stockholm University, founded in 1878 and located in the largest city in Northern Europe, has research groups in a range of areas, including astrophysics, ion physics and material science. It is also known for its high-quality climate and environmental science, social sciences, and humanities research. Stockholm University hosts 30,000 students and 3,900 researchers.

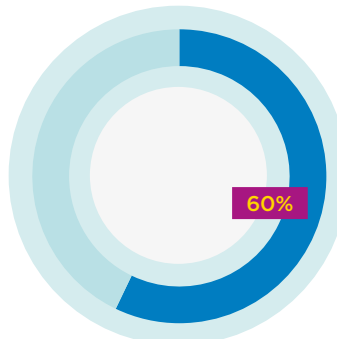
www.su.se/english

“Excellent research in astronomy and subatomic physics.”



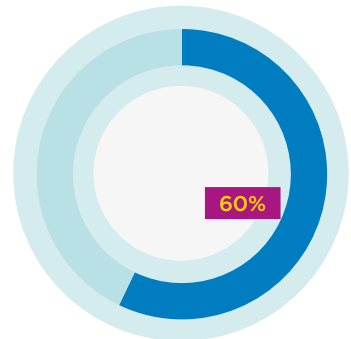
Research funding as proportion of total revenue

Out of its total revenue of almost EUR 530 million, Stockholm University allocates almost 60 percent, EUR 320 million, to research.



Employees with a research assignment

Of the more than 6,200 employees at Stockholm University, almost 3,900, 60 percent, have research assignments.



Academic papers within technology and natural science

Almost 2,400, around 60 percent, of the more than 3,800 publications from Stockholm University in scientific journals were within the fields of technology and natural science.

LINKÖPING UNIVERSITY (LiU)

LINKÖPING

Linköping University, LiU, leads transformative research in materials science, nanotechnology, biomedical engineering, and sustainability. The university is a pioneer in neutron detector technologies, enhancing its capabilities in delivering advanced techniques and equipment to Big Science facilities.

LiU is a part of the academic host of the Swedish Materials Science beamline, P21 at PETRA III at DESY (in collaboration with Royal Institute of Technology in Stockholm).

BiSS is particularly impressed by the delivery of:

- ESS: Sample environment for in-situ ultra-high temperature mechanical testing (in collaboration with Chalmers University of Technology)
- ESS: 10-B isotope enriched B4C neutron detectors
- MAX IV: The ARPES end station at beamline BLOCH



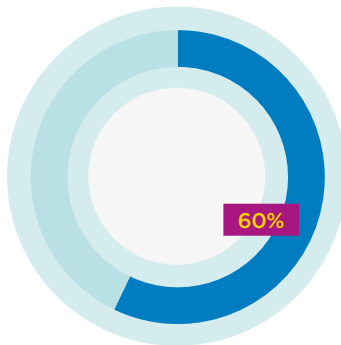
At a glance

Founded in 1975, LiU is today one of the larger universities in Northern Europe, known for its cutting-edge interdisciplinary research in areas such as artificial intelligence, cybersecurity, materials science, and nanotechnology and for its strong collaboration with industry and society. It hosts 40,000 students and 2,300 researchers.

liu.se/en

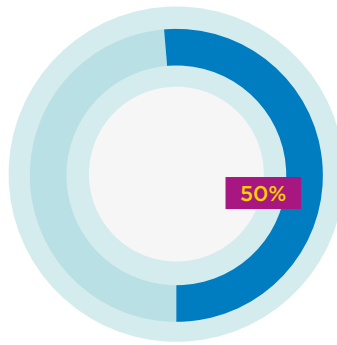
“The academic equivalent of a superpower within material detection technology and computer science.”

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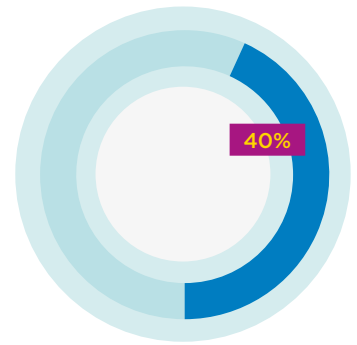
Research funding as proportion of total revenue

Out of its total revenue of almost EUR 400 million, Linköping University allocates almost 60 percent, EUR 230 million, to research.



Employees with a research assignment

Of the more than 4,600 employees at Linköping University, more than 2,300, 50 percent, have research assignments.



Academic papers within technology and natural science

More than 1,200, around 40 percent, of the more than 2,800 publications from Linköping University in scientific journals were within the fields of technology and natural science.

CHALMERS UNIVERSITY OF TECHNOLOGY



GOTHENBURG

Chalmers' engagement in Big Science stems from interdisciplinary research, advanced facilities and infrastructures, and a collaborative environment. Its close ties with industry and government agencies enhance the ability to tackle complex challenges and deliver impactful solutions.

Chalmers played key roles in developing CERN's Large Hadron Collider (LHC), establishing the European Spallation Source, and FAIR.

Chalmers is also the node for Swedish engagement in developing the SKA Observatory.

BISS is particularly impressed by the delivery of:

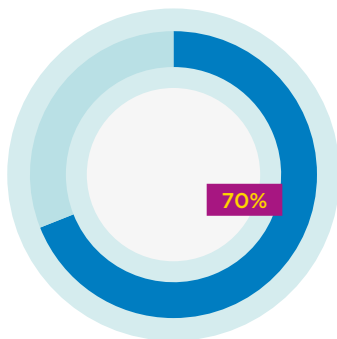
- ITER: Additive Manufacturing for Fabrication of 316L-Grade Components for the fusion reactor
- CERN: Assessment of the integrity of IGBT-based power stacks critical for magnet power supplies in particle accelerators
- FAIR: Development of the front-end system for the CALIFA photon- and particle calorimeter
- ITER: Leads the design and implementation of an integrated modelling infrastructure for ITERIS
- MAX IV: Methodology development for simultaneous X-ray diffraction and absorption spectroscopy experiments
- ESS: Modelling and analysis tools and software for in-situ time-resolved neutron diffraction
- MAX IV: Development of nanoindentation sample environment for NanoMAX

At a glance

Renowned private research university in, Sweden's second-largest city. Founded in 1829, it is one of Sweden's leading technical universities. It has a structure for interdisciplinary work through Areas of Advance, such as Material Science, and Information and Communication Technology. Chalmers hosts 10,000 students and 2,300 researchers.

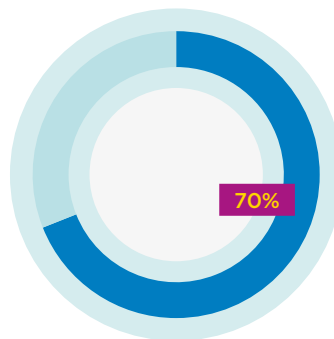
www.chalmers.se/en

“An ability to deliver impactful solutions to global scientific endeavours.”



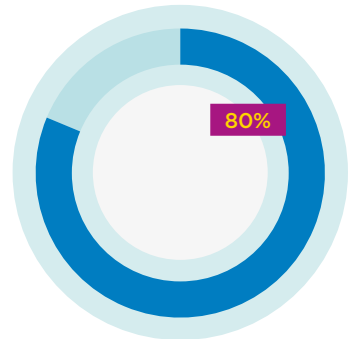
Research funding as proportion of total revenue

Out of its total revenue of EUR 380 million, Chalmers allocates more than 70 percent, EUR 270 million, to research



Employees with a research assignments

Of the more than 3,450 employees at Chalmers, almost 2,300, 70 percent, have research assignments



Academic papers within technology and natural science

More than 3,000, 80 percent, of more than 3,700 publications from Chalmers in scientific journals were within the fields of technology and natural science.



Myfab hosted by Chalmers

Myfab, the national research infrastructure to support micro and nanofabrication, is a network of facilities located at Chalmers University of Technology in Gothenburg, KTH Royal Institute of Technology and Stockholm University in Stockholm, Lund University, and Uppsala University.

Myfab equipment and cleanrooms are critical for advancements in various scientific fields, they provide advanced fabrication tools and expertise, enabling the development of technologies such as sophisticated sensors and microchips.

In the realm of Big Science, Myfab can significantly enhance experimental setups and data acquisition methods across multiple

disciplines. For instance, Myfab's technological innovations can contribute to advancing particle physics experiments, where precise instrumentation is critical, or in environmental monitoring, where nano-enabled sensors can detect pollutants at incredibly low concentrations.

www.myfab.se

“Myfab equipment and cleanrooms enable development of sophisticated sensors and microchips.”

Onsala Space Observatory (OSO) hosted by Chalmers

Onsala Space Observatory, OSO, is renowned for developing cutting-edge receiver technology and sophisticated data processing methods pivotal to radio observatories like the Atacama Large Millimetre/Submillimetre Array (ALMA) in Chile.

OSO delivers design and technical development of receivers and digital technology as well as the development of AI/ML techniques to study, e.g. known classes of cosmic objects and to discover new phenomena.

Within OSO, the Group for Advanced Receiver Development (GARD) and the Technical Support Group (TSG) lead technical innovation, designing and refining cutting-edge receiver systems and integrating these into complex radio astronomy telescopes.

OSO's expertise includes developing specialised components and signal processing techniques tailored for research needs, directly enhancing both international radio astronomy projects and the radio observations made at the Onsala site, which, among other things, image black holes and monitor Earth orientation and help define the terrestrial and celestial reference frames.

BiSS is particularly impressed by the delivery of:

- SKA: Contributing to the design and technical development of the SKA's receivers and digital technology, as well as developing the Swedish node of the SKA regional network to handle the data that will be produced - approaching 1 PB/year
- SKA: Designs and prototypes Band 1 receivers and digitiser, together with industrial partners
- ESS: Contributes Band 5 and Band 2 receivers, enhancing millimetre/submillimeter astronomy capabilities, for the ALMA telescope.

www.chalmers.se/en/infrastructure/oso

“Experts in radioastronomy and associated technical development.”



UNIVERSITY OF
GOTHENBURG

UNIVERSITY OF GOTHENBURG

GOTHENBURG

The University of Gothenburg excels in a range of areas. It has pioneering research in physics, e.g. condensed matter physics, quantum technologies, and particle physics. It has made significant contributions to the Isolde experiment at CERN, Max IV and XFEL, among other facilities.

BiSS is particularly impressed by the delivery of:

- XFEL: Instrument Serial Femtosecond Crystallography (SFX) to increase the capacity for life science studies
- MAX IV: Established a serial crystallography

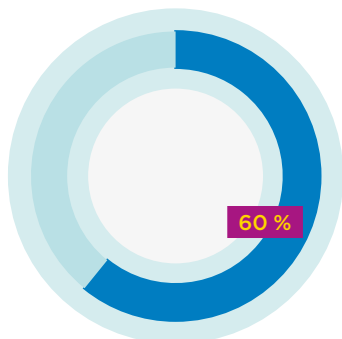
“Excellent fundamental research
in a range of areas.”

At a glance

Founded in 1891 this is one of Sweden's largest universities working across a wide range of disciplines. Main focus is on humanities, social sciences, marine science, medicine, and fine arts, but the university is also highly specialised in other fields of natural science. The University of Gothenburg hosts approximately 37,000 students and around 4,200 researchers.

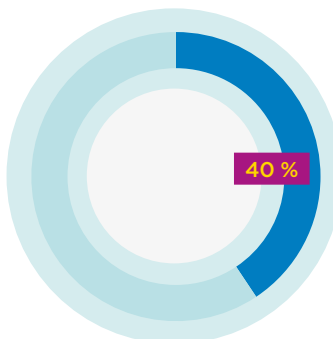
www.gu.se/en

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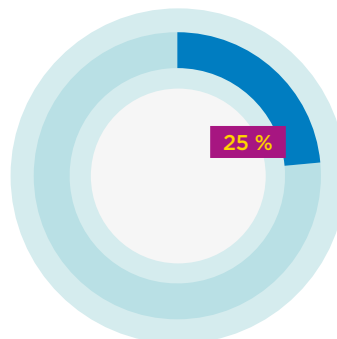
Research funding as proportion of total revenue

Out of its total revenue of EUR 660 million, the University of Gothenburg allocates more than 60 per cent, EUR 400 million, to research.



Employees with a research assignment

Of the more than 7,000 employees at the University of Gothenburg, 4,200, 40 percent, have research assignments.



Academic papers within technology and natural science

More than 1,400, almost 25 percent, of more than 6,000 publications from Gothenburg University in scientific journals were within the fields of technology and natural science.

RISE, RESEARCH INSTITUTES OF SWEDEN

HQ GOTHENBURG, FACILITIES AROUND SWEDEN

RISE has activities and laboratories at a large number of different locations all over Sweden.

BiSS is particularly impressed by the delivery of:

- CERN: Design and manufacture of a reference high-voltage pulse divider
- CERN: Review of the north area sprinkler system design parameters
- GSI/FAIR: Performance test for data centre optimisation
- ITER: Pre-study of electrical power converters for ELM coils
- ITER: Design and build test systems for static magnetic fields
- SKA: Tests of receivers, EMC
- SKA: Evaluation of systems for time and frequency synchronisation

High Voltage Laboratory

The RISE High Voltage Laboratory combines expertise with advanced measurement technology in high voltage and current including power electronics. The lab offers accurate measurement of high voltage and high current, as well as electromagnetic immunity determination for sensor performance in the presence of high magnetic fields. They also develop precise measurement solutions for the impact of magnetic fields on power electronics functionality.

Safety Technology

RISE has one of the largest fire protection engineering departments in the world. RISE offers testing and certification of fire safety for materials and structures and performs research into fire risks and the environmental impact of fires. RISE also has long-standing experience on seismic testing and modeling.

EMC, Electromagnetic Combability

RISE is the largest EMC test laboratory in northern Europe, including more than ten various test chambers for EMC and wireless communication testing, for a range of different sample sizes and frequencies. They also perform high-end research

At a glance

RISE is a merger of several prominent research institutions in Sweden, including SP, the Technical Research Institute of Sweden. It is known for its extensive work in applied research, testing, and certification across various industries. RISE has approximately 2,800 employees and reports an annual turnover of around EUR 300 million.

www.ri.se/en

“Swedens national One-Stop-Shop when it comes to commissioned research.”

on new measurement techniques and systems. RISE is one of very few laboratories in the world approved by SKAO for RFI/EMC compliance measurements.

ICE Datacenter, Infrastructure and Cloud Research & Test Environment

The RISE ICE data center offers a stable environment optimised for testing IT and cloud-related applications and processing large amounts of data. It also has one of Sweden's largest computer clusters which is based on supermicro system, for training of large language models, machine learning, AI, and VR. Furthermore, the ICE data center offers performance test of IT-infrastructure from a sustainable and circular perspective.

Vacuum

RISE has extensive expertise in the area of vacuum and pressure technology. It hosts the Swedish national laboratory for pressure and vacuum.



UNIVERSITY WEST

TROLLHÄTTAN

University West conducts research on production processes in manufacturing, with particular focus on welding and welding-based additive manufacturing (AM), powder bed fusion additive manufacturing, thermal spraying (surface treatment), flexible automation, advanced non-destructive testing and evaluation (NDT), and operations and supply chain management.

The Thermal Spray Group technology is typically used to deposit coatings to extend the life of components or impart special functions on their surfaces. The range of materials that can be deposited includes metals, alloys, ceramics, plastics, and composites.

BiSS is particularly impressed by the delivery of:

- ESS: The development of luminescent coatings for critical parts of the ESS installation

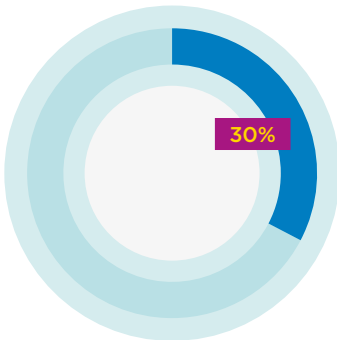
At a glance

University West, also known as Högskolan Väst, was established as late as 1990 and has since made a reputation for its focus on applied research within, e.g. production processes in manufacturing. The university collaborates closely with industry and the public sector to ensure that its research has practical applications. The university hosts 11,000 students and 350 researchers.

www.hv.se/en

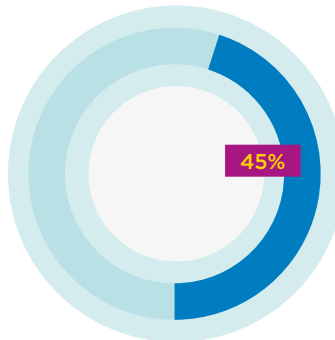
“Challenge-driven research, firmly founded in industry collaborations.”

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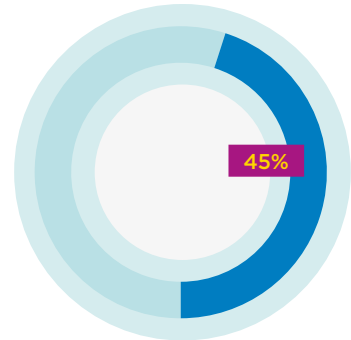
Research funding as proportion of total revenue

Out of its total revenue of around EUR 60 million, University West allocates almost 30 percent, EUR 18 million, to research.



Employees with a research assignment

Of the around 750 employees at University West, 350, 45 percent, have research assignments.



Academic papers within technology and natural science

A total of 110, 45 percent, of the 240 publications from University West in scientific journals were within the fields of technology and natural science.



LUND UNIVERSITY

LUND UNIVERSITY

LUND

Lund University's research within Big Science technology spans everything from developing novel power converter concepts for particle accelerators and fusion reactors, to tackling complex societal challenges related to climate change through novel lasers and photon sources, and enhancing device performance through advanced nanotechnology.

LU is host to the Swedish synchrotron facility, MAX IV. Researchers at the university have also played an instrumental role in developing the European Spallation Source (ESS). LU also has a node in the Swedish nanofabrication network MyFab.

BiSS is particularly impressed by the delivery of:

- CERN: Advanced Resource Connector Software for ATLAS and LHC computing
- CERN: Construction of the Time Projection Chamber in Alice at LHC
- CERN: Contribution to the Isolde-experiment
- ESS: Cost-effective and versatile testbed for novel neutron detectors
- MAX IV: High Field/High Gradient Magnets
- ESS: High Power Modulators Design for the ESS Linac
- ESS: Low-Level RF System
- ESS: Remote Handling within the Active Cells Facility at the ESS using Digital Reality Techniques
- CERN: Upgrade of the ALICE TPC detectors
- ITER: Electrical power converters for the ITER ELM coils

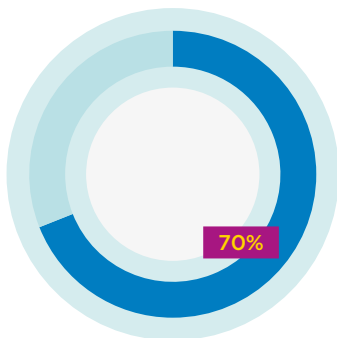
At a glance

Lund University, founded in 1666, is one of Northern Europe's oldest and largest universities. The university is known for its significant research contributions within democracy, digitalisation, sustainability, and health. It hosts the MAX IV Laboratory. Lund University has 45,000 students and 5,800 researchers.

www.lunduniversity.lu.se

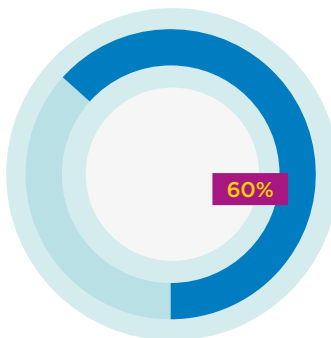
“Host to the world's brightest light source, the MAX IV Laboratory.”

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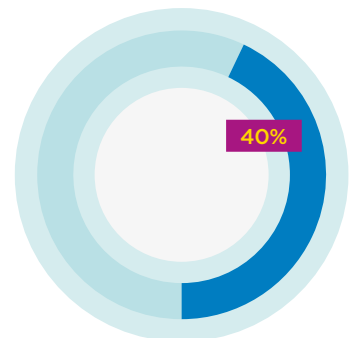
Research funding as proportion of total revenue

Out of its total revenue of more than EUR 860 million, Lund University allocates almost 70 percent, EUR 590 million, to research.



Employees with a research assignment

Of the more than 9,100 employees at Lund University, 5,800, over 60 percent, have research assignments.



Academic papers within technology and natural science

Around 2,700, 40 percent, of the more than 6,200 publications from Lund University in scientific journals were within the fields of technology and natural science.



CHALMERS
UNIVERSITY OF TECHNOLOGY



LUND UNIVERSITY



LULEÅ
UNIVERSITY
OF TECHNOLOGY



UPPSALA
UNIVERSITET



Teknikföretagen



Syd
Industriföretags utvecklingscentrum