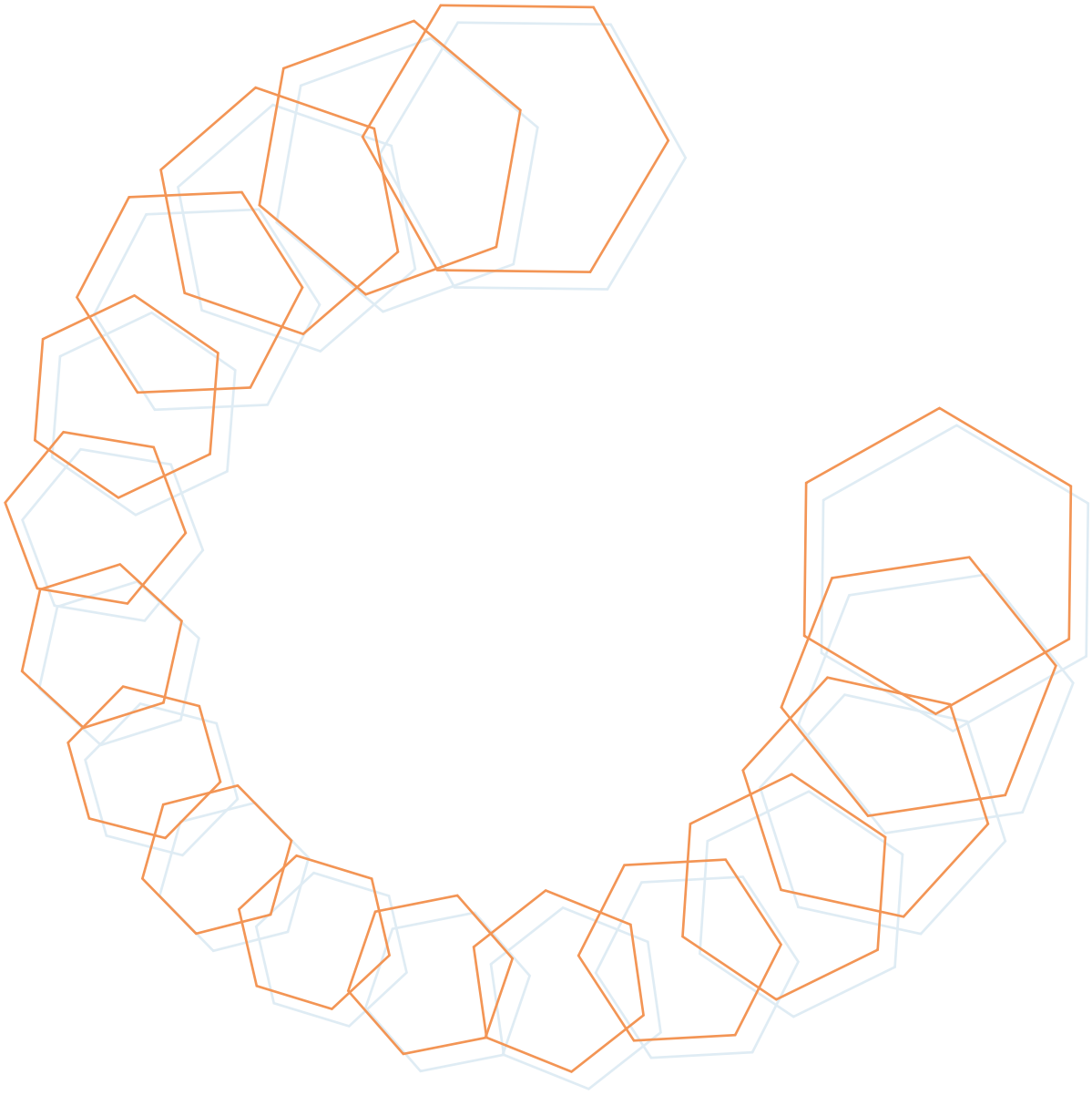
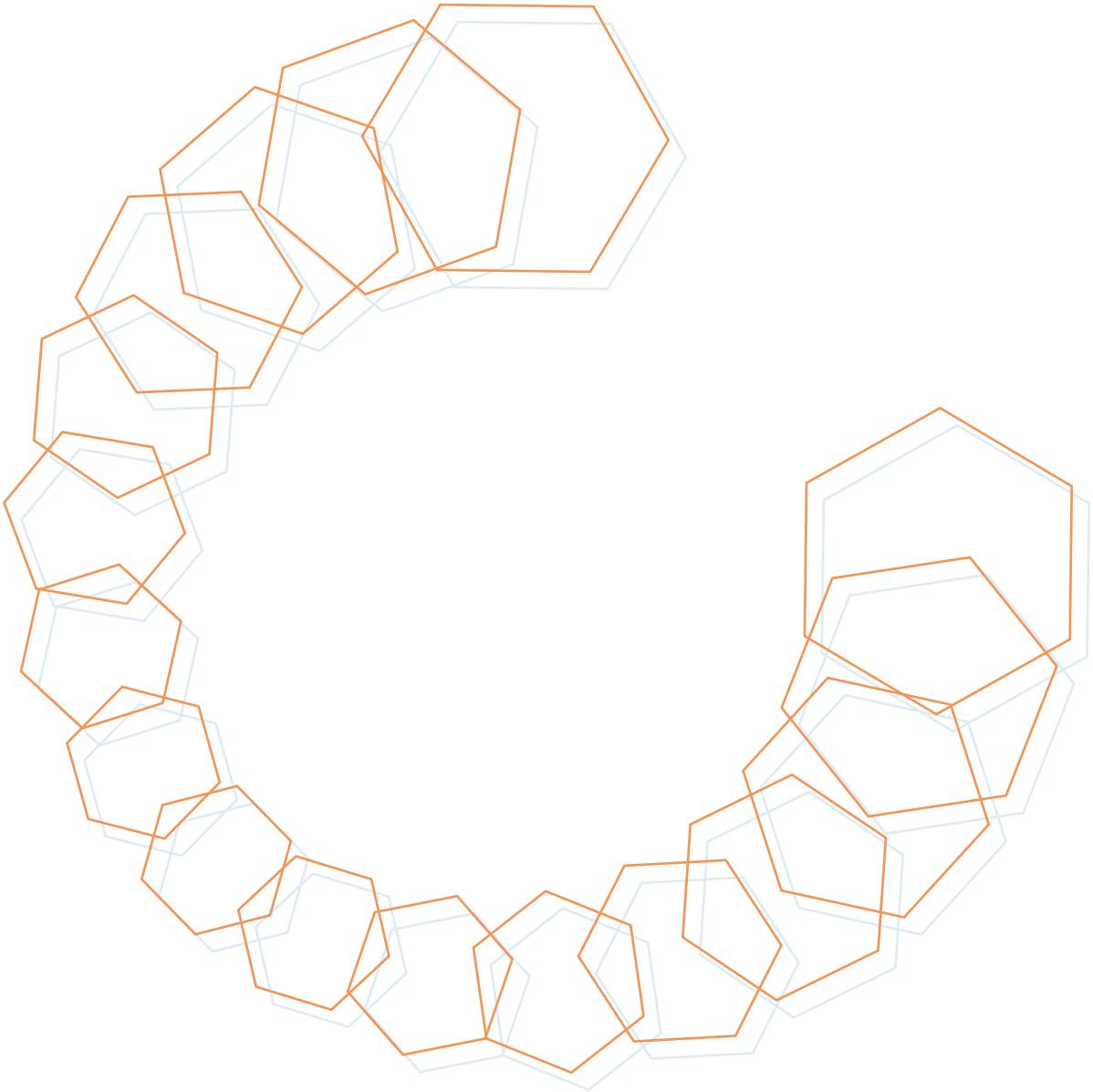


Annual Review
2024

CERN

CERN & Society
Foundation



A word from the Chair, Michel Spiro

DEAR DONORS AND FRIENDS,

What a milestone year!

Thanks to your incredible support, the CERN & Society Foundation had an extraordinary 2024, marking our tenth anniversary with record-breaking achievements and transformative new initiatives.

To every donor, partner and friend of the Foundation: there are no words to fully capture our gratitude. You are the driving force behind these successes. Your belief in the power of science and education transforms ambitions into action and inspires us to keep reaching higher.

As we step into our second decade, let's continue this journey together. With your support, we're ready to achieve even greater things in the years ahead.

2024 was special in many ways. Together, we celebrated a decade of advancing CERN's mission to ignite scientific curiosity and inspire society. From 2014 to 2024, we have touched the lives of thousands of individuals. The journey from our humble beginnings to today's impactful achievements has been remarkable, and it's all thanks to your unwavering trust and commitment.

Your generosity empowers us to dream bigger, reach further and deliver even more transformative programmes that resonate across the globe. From students to educators, from researchers to the public, countless lives are enriched by your support.

An important achievement was the launch of the non-Member State (NMS) PhD programme. This initiative is designed to empower the next generation of scientists, offering them the opportunity to join the vibrant CERN community and contribute to groundbreaking research. The NMS PhD programme is more than an academic pursuit – it's an investment in the future of global science.

2024 also saw the exciting debut of the TIMEPIX@school project. This innovative programme brings CERN technology directly into classrooms, empowering students to use advanced particle detectors to explore the invisible world of radiation and particle physics and awakening their inner scientist. Another exciting project that brings science to where people are is the CERN Festival programme. With a Science Pavilion present at various music festivals around the world, the project is designed to reach national populations at large. The CERN Festival programme saw over 17 000 of visitors to the science pavilions in 2024.

We also reflected on our roots by celebrating the tenth anniversary of the CERN & Society Foundation. A vision first championed by Professor Rolf Heuer in 2014, the Foundation has grown into a vibrant platform for bringing CERN's spirit of curiosity to the world. In 2024, we took the time to honour that legacy while looking forward to the impact we'll continue to create together.

Looking back, we're inspired by the passion of students who experienced their first taste of science, the determination of PhD candidates tackling complex challenges and the creative passion of artists interpreting the Universe. Each story reaffirms our purpose and highlights the indispensable role of your support.

As we look ahead, we invite you to join us in celebrating science for society and technology, especially as 2025 marks the International Year of Quantum Science & Technology, while 2024-2033 has been declared the International Decade of Sciences for Sustainable Development. Together, we can foster education and outreach, drive innovation and knowledge sharing, and champion culture and creativity.

Sincerely,

SUMMARY

"I BELIEVE THAT THE CERN & SOCIETY FOUNDATION PLAYS AN IMPORTANT ROLE IN INSPIRING THE NEXT GENERATION OF SCIENTISTS. AS THE STUDENTS OF TODAY ARE POTENTIALLY THE SCIENTISTS OF TOMORROW, IT IS OUR DUTY TO ENCOURAGE THEM TO UNDERTAKE A CAREER IN SCIENCE AND HELP THEM PURSUE THIS GOAL. I PERSONALLY KNOW SOME WHOSE CAREER IN SCIENCE WOULD NOT HAVE BEEN POSSIBLE WITHOUT THE SUPPORT OF THE CERN & SOCIETY FOUNDATION."

Fabiola Gianotti, CERN Director-General

WHO WE ARE

"BRIDGING SCIENCE, CULTURE AND INNOVATION TO CREATE A BETTER AND BRIGHTER FUTURE!"

WHO WE SERVE

By supporting the development of practical applications from fundamental research, inspiring individuals through events and artistic expression, and achieving greater public engagement with science, **we aim to benefit society at large.**

Many of our projects and activities focus **on engaging students and science educators in the scientific method,** stimulating their curiosity, and motivating them to understand and pursue careers in science, technology, engineering, and mathematics (STEM) fields.

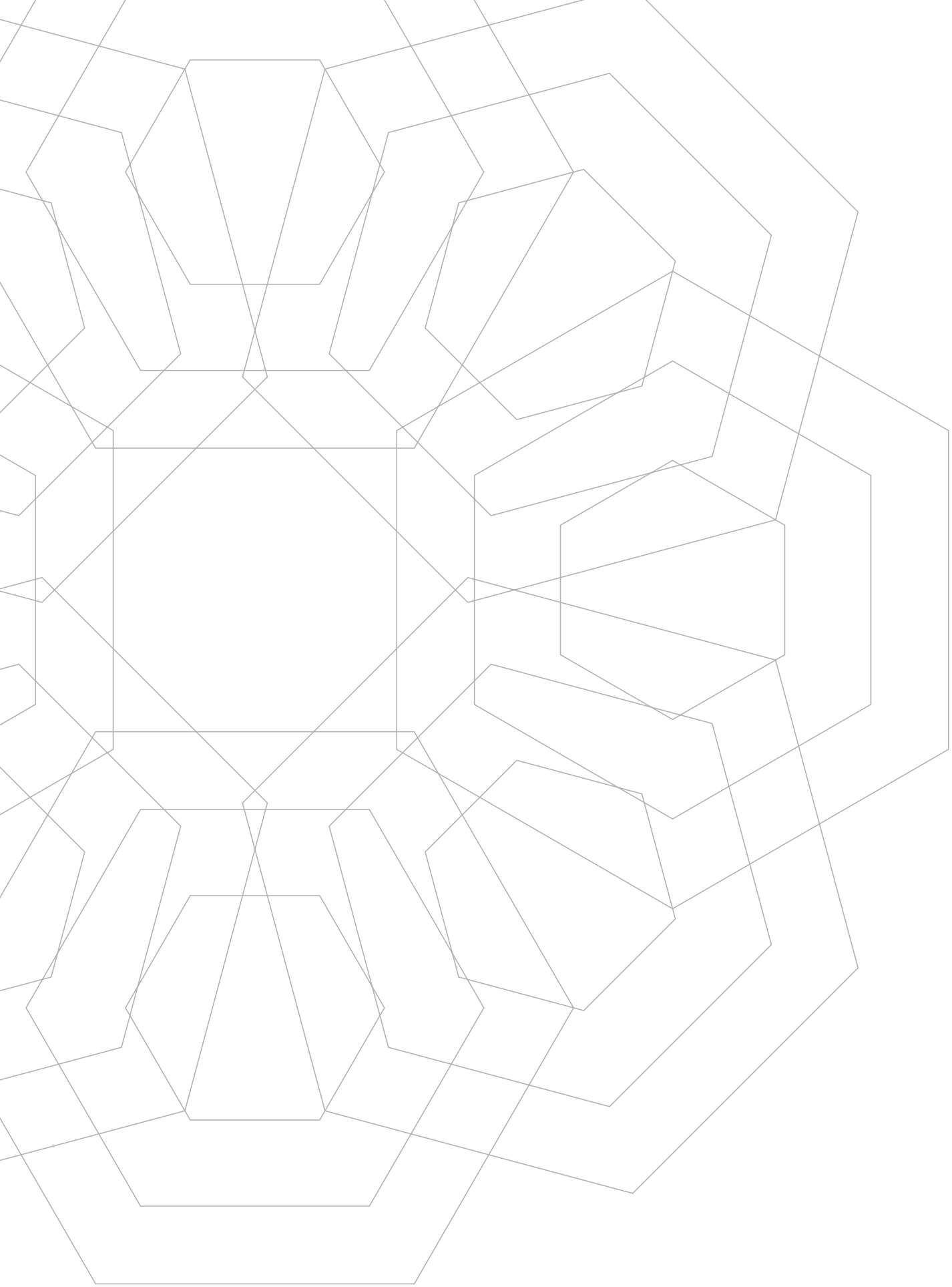
WHO WE ARE

We believe in igniting curiosity, inspiring young people to choose scientific careers, engaging people in STEM and working towards improving lives around the globe.

At the CERN & Society Foundation, we operate nationally and internationally to pursue this mission, across three main areas: **Education and Outreach, Innovation and Knowledge Exchange, and Culture and Creativity.**

WHAT MAKES US UNIQUE

CERN has a long tradition of scientific and technological excellence, generated by a culture of openness and knowledge sharing across borders, and nurtured through education and training. The CERN & Society Foundation is in a unique position to leverage this expertise to the benefit of society.



CELEBRATING A DECADE OF IMPACT

As we celebrate the tenth anniversary of the CERN & Society Foundation, it is remarkable to reflect on the journey we have undertaken together. Over the past decade, the Foundation has grown from an ambitious idea into a steady force connecting science with society. Thanks to the unwavering engagement of numerous donors and supporters, our reach has expanded from **5 projects in 60 countries to 21 projects spanning 130 countries**, making science accessible to diverse communities worldwide.

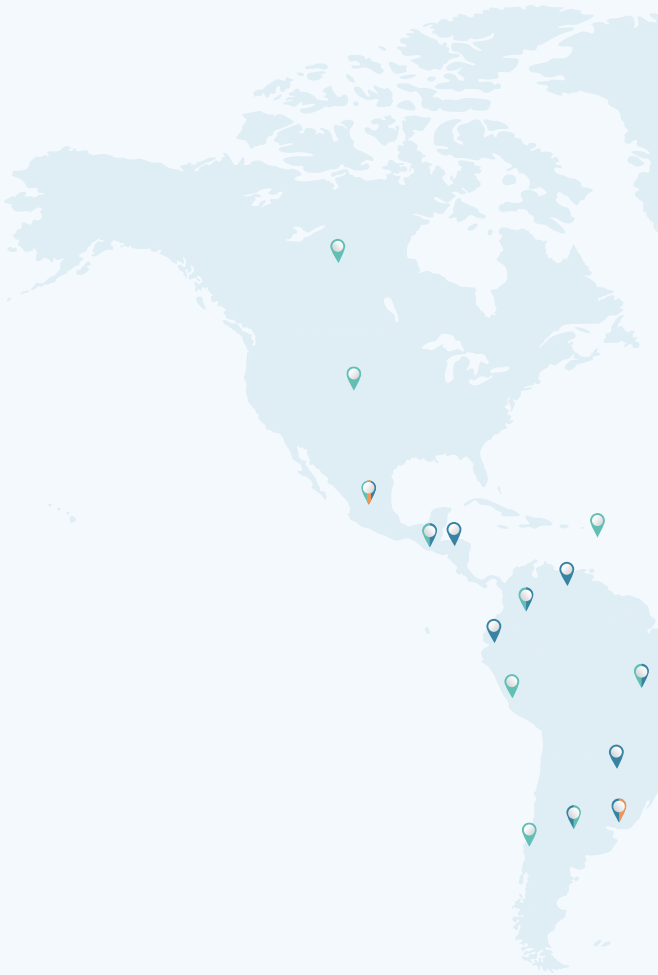
The numbers speak volumes about the impact of the joint effort. Since its inception, the Foundation has awarded over 25 PhDs, trained over 700 teachers at CERN and reached over 20 000 students through flagship initiatives such as Beamline for Schools and the non-Member State Summer Students programme. In total, we have connected with hundreds of thousands of people globally, proving that science knows no borders and that curiosity is truly universal.

Our work would not have been possible without the support of the global community at CERN, the project leaders, every single passionate CERN employee and every one of our donors, like Rolex, whose steadfast commitment as our Title Partner has elevated many of our initiatives. Together with our incredible collaborators and ambassadors, we have turned ambition into action, creating transformative opportunities for students, teachers and researchers alike. Their belief in our mission fuels Foundation's progress and ability to make a difference, from sparking curiosity in classrooms to inspiring future scientists at CERN.

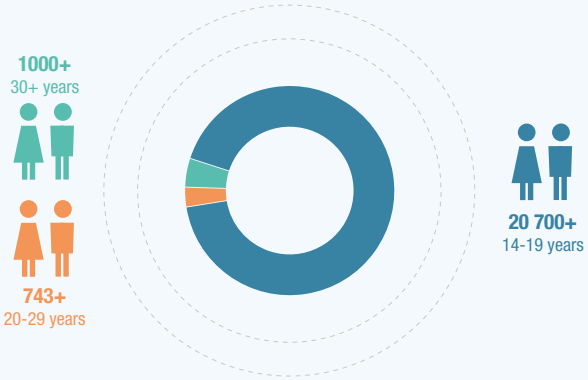
As we reflect on this milestone, we do so with deep gratitude for the dedication of everyone who has contributed to this success.

From our Board Members to our Ambassadors, who are the custodians of this vision, guiding it to new heights, to the dedicated leaders and teams at CERN, whose tireless commitment and passion makes this journey possible. With their continued support, the next decade holds even greater promise. Together, we will continue to inspire future generations, foster global collaboration and demonstrate the transformative power of science in society.

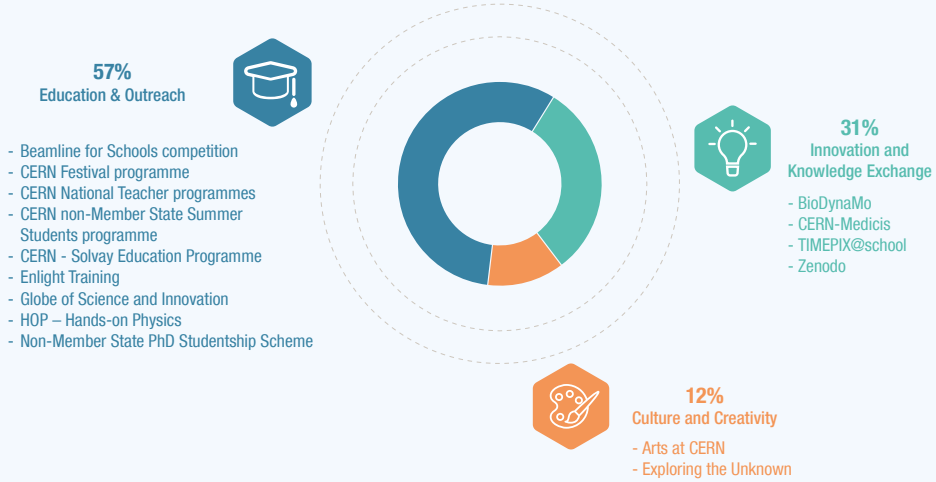
THE IMPACT



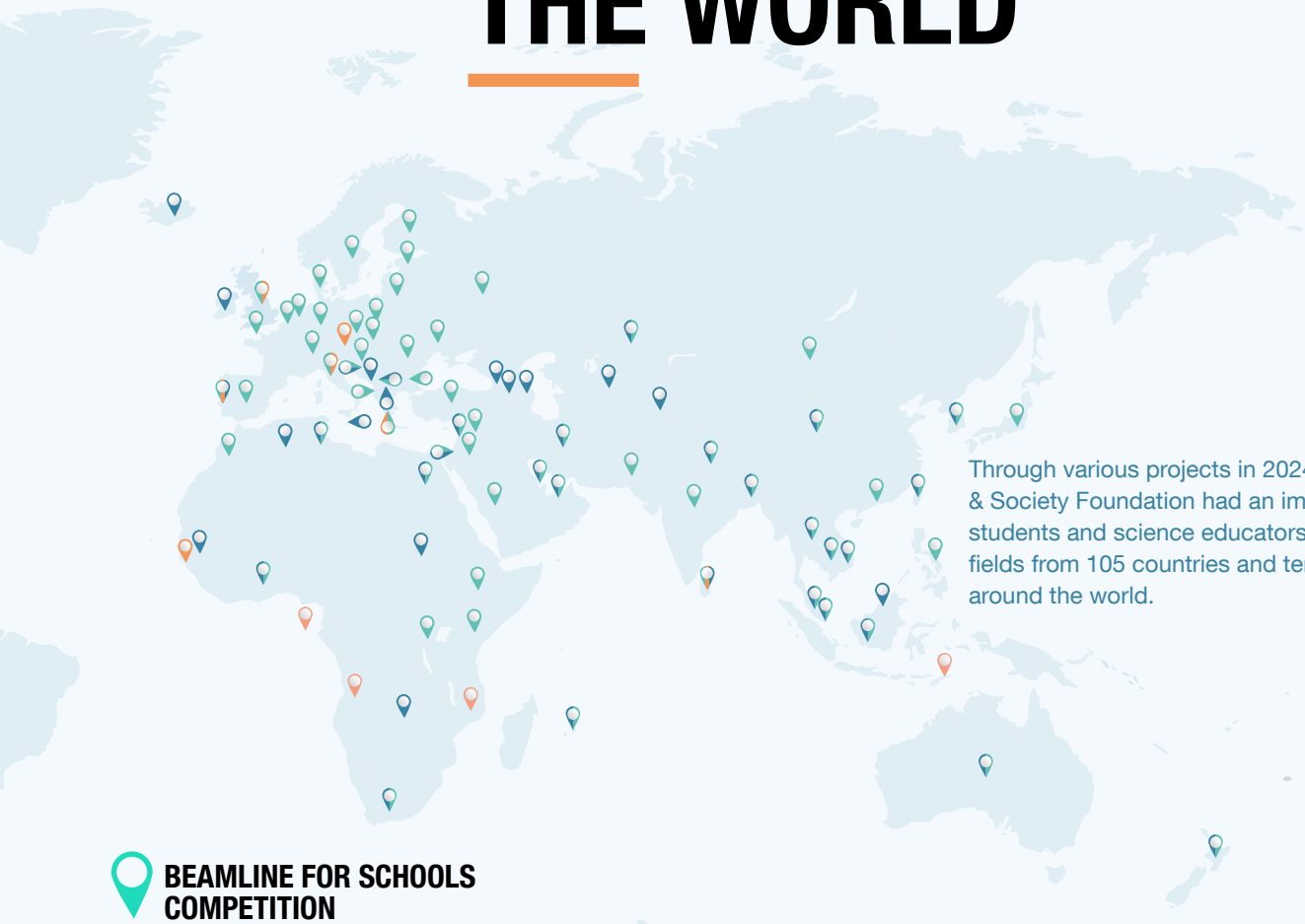
THE AGE GROUPS OF OUR BENEFICIARIES SINCE 2014



OUR GRANTS IN 2024 (EXCLUDING SCIENCE GATEWAY)



OUR REACH AROUND THE WORLD



Through various projects in 2024, the CERN & Society Foundation had an impact on students and science educators in STEM fields from 105 countries and territories around the world.

BEAMLINE FOR SCHOOLS COMPETITION

Engaging high-school students in real experimental particle physics research at CERN and our partner DESY (Deutsches Elektronen-Synchrotron) **3000** students submitted **461** proposals, and three winning teams were welcomed on site, fully supported by the CERN & Society Foundation.

Gender distribution:

1110

1860 Not specified: 30

CERN NATIONAL TEACHER PROGRAMMES

Helping teachers to empower students and promote the future of science through their own scientific education. **213 of the 837** teachers trained at CERN were supported by the CERN & Society Foundation.

Gender distribution:

116

97

NON-MEMBER STATE SUMMER STUDENTS

Giving the next generation of scientists the skills to contribute to the development of their communities. **69 of the 148** students selected for the summer programme were fully supported by the CERN & Society Foundation.

Gender distribution:

30

39

2024 HIGHLIGHTS IN PICTURES

JANUARY

BioDynaMo – cutting-edge software helps battle cancer

A groundbreaking mathematical model from the BioDynaMo project, developed at CERN openlab, simulates vascular tumour growth in breast cancer and predicts responses to treatment, paving the way for personalised medicine.

FEBRUARY

Science Gateway welcomed its 100 000th visitor

On 6 February, CERN Science Gateway welcomed its 100 000th visitor, just four months after opening. With an average of 1000 daily visitors, Science Gateway continues to inspire all ages through interactive exhibitions, guided tours and hands-on activities, supported by the dedication of CERN guides and donors.

APRIL

Artists selected for the sixth edition of Connect

Connect, the art residency programme by Arts at CERN and Pro Helvetia, invites Swiss-based artists to explore the intersection of science and art. 2024's residents, Robin Meier Wiratunga and Vimala Pons, will develop Guided Meditations for the End of the Universe, transforming cosmological theories into meditative experiences through music, light and sonified data.

MAY

Alice Bucknell won the second edition of the Collide Copenhagen residency award

Alice Bucknell was awarded the second Collide Copenhagen residency, a collaboration between Arts at CERN and Copenhagen Contemporary. During the residency, Bucknell will develop Small Void, a project exploring microscopic black holes, Earth's ecosystems, and the intersection of art, science and technology through immersive game worlds.

JULY

CERN Festival programme kicks off in four countries

The CERN Festival programme took place in July and August with four festivals in four countries. More than 17 000 people took part overall. The programme proposed a total of 81 workshops, talks, panels and hands-on activities, and invited speakers like Eduardo Sáenz de Cabezón (mathematician and TV personality), Andreas Mogensen (commander of the International Space Station), Mike Berners-Lee (researcher & professor on climate change), Spencer Kelly (BBC), Morten Meldal (Nobel Prize winner) and Dana Drábová (physicist and politician).

SEPTEMBER

Arts at CERN awarded the European Commission's S+T+ARTS Grand Prize for Innovative Collaboration

Arts at CERN won the prestigious S+T+ARTS Grand Prize for Innovative Collaboration, awarded by the European Commission, for fostering transformative connections between art, science and society. The award ceremony took place on 5 September at the 2024 Ars Electronica in Linz, Austria, where Arts at CERN presented an exhibition highlighting the collaborative nature of its programmes.

SEPTEMBER

CERN and DESY welcomed the winners of the 2024 Beamline for Schools competition

From 12 to 26 September, CERN and DESY welcomed the winners of the 2024 Beamline for Schools competition. Students from Estonia, Japan and the USA carried out their own experiments using accelerator beams at the facilities. “Mavericks”, the team from Estonia, and “Sakura Particles”, the team from Japan, came to CERN, while “SPEEDers”, the team from the United States, was invited to DESY.

OCTOBER

CERN celebrated its 70th anniversary

CERN turned 70 on 29 September and hosted a special high-level ceremony on 1 October. The ceremony, held at CERN Science Gateway, was attended by 38 national delegations and included speeches by Heads of State and Government from Bulgaria, Italy, Latvia, Serbia, Slovakia and Switzerland, Her Royal Highness the Princess Astrid of Belgium, and the President of the European Commission. In addition to the national delegations, many scientific, political and economic leaders were also present.

NOVEMBER

CERN & Society Foundation celebrated its tenth anniversary

The Foundation has grown from 5 projects in 60 countries to 21 projects in 130 countries. It now reaches thousands of people directly through initiatives that link science and society, and many more through the popularisation of science. The advancement of research and technologies satisfies the thirst for understanding and touches our lives, from medical applications to information technology. All of this has been made possible thanks to the unwavering support of partners and community.

OUR DONORS

WE ARE GRATEFUL TO THE MANY DONORS AND PARTNERS WHO GENEROUSLY SUPPORTED THE CERN & SOCIETY FOUNDATION IN 2024. THANK YOU FOR YOUR CONTINUOUS TRUST AND OUTSTANDING COMMITMENT.

INDIVIDUALS

Alice Hensel
Ana Godinho
Andre Graca
Angela Reboredo
Anna Cook
Anthony Alexander
Arik Yasemin
Ben Dooks
Carlo Zara
Catherine Mangham
Chee Mun Cheah
Christian Amann
Cory Anderson
Craig Hay
Damian Kenny
Damian Zapart
Daniel Gerber-Balmer
Daniel Shapiro
Daniel Wales
David Hersey
David Wttten
Edmond Offermann
Edward Karavakis
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Rob Johnson
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Russell Taylor
Samuel Tran Thanh
Serena Graziato
Simon van der Sluijs
Stefan Bernegger
Stephan Petit
Stephen Hegarty
Svetlin Angelov
Tania Carvalho
Thomas Fadriquela
Tim Bell
Tzu-An Sheng
Valentina Topi
Vita Broeken
Yannik Hannusch
Yuliy Schwartzburg

“A FEW WEEKS AGO, I HAD THE OPPORTUNITY TO ATTEND ROTOTOM, WHERE THIS YEAR AN AREA WAS RESERVED FOR SCIENTIFIC DISSEMINATION WITH THE DISCOVERY LAB. I WOULD HIGHLIGHT THE HUMOUR AND INTEREST WITH WHICH THE SPEAKERS MANAGED TO CAPTIVATE THE PUBLIC AND AT THE SAME TIME LET US KNOW THAT SCIENCE IS SOMETHING THAT WE CAN ALL ENJOY. IF IT WERE TO BE REPEATED IN THE FUTURE, I WOULD CERTAINLY GO, AS IT WAS UNDOUBTEDLY AN EVENT THAT I ENJOYED A LOT. I LEARNED A LOT AND MET INCREDIBLE PEOPLE. FINALLY, I AM EXTREMELY GRATEFUL FOR THE EFFORT AND DEDICATION OF ALL THOSE PEOPLE WHO MADE IT POSSIBLE.”

Isabel (13 years old), youngest individual donor and participant at the CERN Festival programme at Rototom, 2024

FOUNDATIONS

Charities Aid Foundation
European Physical Society
Fondation NOVA
Fondazione Carla Fendi
Fondazione Giovanni Agnelli
Fondazione Marino Golinelli
Foundation H. Dudley
John S. Latsis Public Benefit Foundation
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Wilhelm and Else Heraeus Foundation
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IN-KIND CONTRIBUTION

Pestalozzi Attorneys at Law

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Teatro Invito Societa
Ville de Geneve
World Economic Forum
Plazi
Copenhagen Contemporary

We also thank the many donors who supported the CERN & Society Foundation in 2024 and wished to remain anonymous. A special thank you to those who left a gift to the CERN & Society Foundation in their will in 2024.

EDUCATION AND OUTREACH

CERN FESTIVAL PROGRAMME

4
Total number of festivals

17 000
Total number of participants in 2024

18
Number of workshops

50
Number of talks

The CERN Festival programme is a way to spread CERN's spirit of curiosity by interacting with people where they are, reaching out to current and future social and cultural influencers.

By setting up a Science Pavilion at music festivals, the project is designed to reach audiences that are not necessarily interested in or attracted by the scientific domain yet, with the goal of encouraging people's interest in STEM and attracting future talents.

This unique programme has enabled young people to explore the realm of science through a creative lens in an accessible format. In 2024, the programme proposed 18 workshops and invited speakers like Eduardo Sáenz de Cabezón (mathematician and TV personality), Andreas Mogensen (commander of the International Space Station), Mike Berners-Lee (researcher & professor on climate change), Spencer Kelly (BBC), Morten Meldal (Nobel Prize winner) and Dana Drábová (physicist and politician).

The CERN Festival programme has already been curating this experience across Europe for over six years. It takes the form of a collaboration between a research centre, a festival and research institutes in the host country that seeks to reach new non-scientific audiences.

A participant's perspective:

"I HAVE NO WORDS TO DESCRIBE THE EMOTION AND THE EXCITEMENT. I DISCOVERED AFTER AN ADVERTISEMENT BY ROTOTOM SUNSPLASH THAT THE DISCOVERY LAB EXISTED WITHIN THE FESTIVAL, A SPACE PROMOTED BY CERN IN WHICH DIFFERENT TALKS AND SHOWS RELATED TO SCIENCE WOULD TAKE PLACE. AND ABOUT THE PRESENCE OF OTHER GREAT PHYSICISTS AND MATHEMATICIANS LIKE EDUARDO SÁENZ DE CABEZÓN, WHOM MY SON FOLLOWS AND ADMIRES. HE HAS ALSO BEEN WATCHING HIS VIDEOS AND READING HIS BOOKS. THIS WAS WHAT LED US TO ATTEND OUR FIRST FESTIVAL, WHICH SURPRISED AND ENCHANTED US."

a participant at the Discovery Lab

3000+
Students applied

461
High-school teams

95+
countries & territories
Geographical Reach

BEAMLINE FOR SCHOOLS COMPETITION

The Beamline for Schools (BL4S) competition, an international physics challenge for curious and talented high-school students, invites participants to design physics experiments that can be conducted at fully equipped beamlines in particle accelerators. Teams take on the roles of innovators and problem-solvers, crafting proposals that could be tested at the advanced beam facilities of CERN or DESY (Deutsches Elektronen-Synchrotron, located in Hamburg, Germany).

The 2024 winners, announced in June, were “Mavericks” from Estonia and “Sakura Particles” from Japan, who carried out their experiment at CERN, and the team “SPEEDers” from the United States, who carried out their experiment at DESY. Launched in 2014 to mark CERN’s 60th anniversary, BL4S has grown into a prestigious global competition. Following the success of its inaugural edition, it has continued to expand, reaching its eleventh edition in 2024. To date, 24 teams have been selected as BL4S winners over the years, and more than 16 000 students from around the world have participated in the competition.

The success of the programme is reflected in the record-breaking 2024 BL4S edition, which received over 3000 applications from 461 teams across the globe. Applicants hailed from 99 different countries & territories, highlighting the international reach and appeal of the competition.

In addition to the winning teams, a further 16 teams made it to the final round of the evaluation: 13 were awarded an Outreach Proposal Award and 3 were selected for the Best Video Award.

DID YOU KNOW?

- 2024 marked the fifth anniversary of the fruitful collaboration between CERN and DESY that started in 2019. A hybrid event took place on 16 September 2024, bringing together participants from the DESY campus and CERN. The event gathered this year’s winning students, their coaches, supporting scientists and other advocates (e.g. coaches, scientists, donors, representatives from CERN and DESY and other supporters). The event also welcomed H.E. Riia Salsa-Audiffren (Ambassador Extraordinary and Plenipotentiary, Permanent Representative of the Republic of Estonia to the United Nations Office and other international organisations in Geneva), H.E. Atsuyuki Oike (Ambassador Extraordinary and Plenipotentiary, Permanent Representative of Japan to the international organisations in Geneva), and Abigail Greenwald (Deputy Consul General at the US Consulate General in Hamburg).

- In 2024, the regions represented among the shortlisted teams were Brazil, Bahrain, Bangladesh, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hong Kong, India, Indonesia, Italy, Japan, Kazakhstan, Pakistan, Poland, Romania, Singapore, Spain, Thailand, Türkiye, United Arab Emirates, United Kingdom and United States.

- Students from Türkiye, United States, Thailand, United Kingdom, Bangladesh, Poland, India and Philippines received the Outreach Proposal Award, with telescopes offered by the Belgian project “Stars Shine for Everyone”.

- Additionally, students from United States, Libya and Türkiye collected the Best Video Award, each receiving a kit to build a cloud chamber.

“I HAVE BEEN INTERESTED IN PHYSICS FOR A FEW YEARS BUT BEFORE THIS EXPERIENCE I DIDN’T HAVE ANY CAREER IN MIND. BEAMLINE FOR SCHOOLS HAS IN A WAY PUT THE POSSIBILITY OF WHAT I CAN DO ON THE TABLE. IT HAS MADE MY DREAM OF BEING A PHYSICIST A REALITY.”

Theo, student from the “SPEEDers” team, USA

CERN NATIONAL TEACHER PROGRAMMES

In 2024, CERN welcomed 837 teachers from 62 countries & territories. Through lectures, on-site visits, hands-on workshops and Q&A sessions, participants experienced a dynamic, international research environment.

The National Teacher programmes are brief and intensive professional development programmes that enable high-school teachers to keep up to date with the latest developments in particle physics and scientific disciplines.

Besides offering individual professional development, the programmes provide the teachers with new methods and ideas for the classroom that are key for successful transfer of knowledge.

Another important dimension of the CERN teacher programmes is the social aspect. Over the past years, teachers from all over the world have met at CERN, become colleagues and remained in touch with one another.

On-site programmes

837 teachers

62 countries

32 teacher programmes

30 National Teacher programmes

2 International Teacher programmes

"STAYING AT CERN – AND PARTICIPATING IN THE ACTIVITIES – A PLACE THAT IS ASSOCIATED WITH THE MOST IMPORTANT DISCOVERIES AND GREATEST SCIENTISTS OF OUR TIME, WAS INCREDIBLY INSPIRING FOR ME. I ALSO APPRECIATED THE WELL-BALANCED STRUCTURE OF THE PROGRAMME, WHICH INCLUDED BOTH EXPERIENTIAL SESSIONS AND THEORETICAL INFORMATION. OF COURSE, THE SOCIALISING ASPECT ALSO PLAYED A KEY ROLE IN THE TRANSFER OF KNOWLEDGE."

a participant in the 2024 Greek teacher programme

CERN NON-MEMBER STATE SUMMER STUDENTS PROGRAMME

The Summer Students programme, launched in 1962, has continued to be a very attractive and important enrichment for undergraduate and graduate students in STEM fields, providing an invaluable hands-on experience at CERN. Over the years, the programme has evolved to embrace CERN's vision of inclusivity and diversity, expanding to involve students from non-Member States.

Focusing on strengthening scientific education, particularly in developing regions, the programme attracts a wide range of talented students from around the world. Participants have the chance not only to contribute to some of the most pioneering scientific experiments but also to share their findings with colleagues and mentors at the end of their internship.

The experience at CERN goes beyond just research: it also offers exposure to an international scientific community, cutting-edge technology and opportunities for direct collaboration with CERN scientists, all of which are vital to participants' professional development.

For the 2024 edition, 4498 students applied, with 1591 meeting eligibility requirements. From these, 148 students were selected for the summer internship. Thanks to the generous support of our donors, 69 students received fully-funded scholarships, making this life-changing opportunity possible. These students are set to make meaningful contributions to scientific and technological advancements in their home communities.

1591 Students eligible

50+ countries

4498 Students applied

Geographical Reach

148 Students selected

69 (30 more than in 2023) Supported by the CERN & Society Foundation

DID YOU KNOW?

In 2024, a record 148 non-Member State summer students were hosted at CERN, from 71 different regions.

The non-Member State summer student population consisted of 78 female students (53%) and 70 male students (47%).

A diverse group of 99 physics students, 36 engineering students and 13 computing students took part in the programme.

The largest number of selected students came from Latin America (29.5%), followed by Asia and Oceania (24.7%) and the Middle East and North Africa (17.8%).

In the students' words:

"SUPPORTING STUDENTS TODAY MEANS BUILDING A BETTER TOMORROW. IT'S HEARTBREAKING TO THINK OF ALL THE WASTED TALENT OUT THERE, AND IT REMINDS US WHY PROGRAMMES LIKE THIS ARE SO IMPORTANT. WHEN YOU INVEST IN STUDENTS, YOU'RE NOT JUST FUNDING ONE PERSON'S EDUCATION; YOU'RE CREATING FUTURE LEADERS, INNOVATORS AND PROBLEM-SOLVERS WHO WILL DEVELOP GROUNDBREAKING SOLUTIONS."

Carolina, non-Member State summer student from Mexico, 2024

CERN SCIENCE GATEWAY

In the first full year of operations, the Science Gateway has hosted more than 390 000 visitors from 171 different regions across the world. The Science Gateway now has an average of 1000+ visitors daily. Designed by the world-renowned Renzo Piano Building Workshop, CERN Science Gateway is open to visitors from the age of five upwards from around the world. Science Gateway has allowed CERN to significantly expand its portfolio of educational and outreach activities. Some 500 science shows have taken place in the past year alone, attended by more than 25 000 visitors. Science Gateway also attracted worldwide media attention, with more than 3 500 articles, including a feature in the "52 Places To Go In 2024" in the New York Times.

"WE WANT TO SHOW THE IMPORTANCE OF FUNDAMENTAL RESEARCH AND ITS APPLICATIONS TO SOCIETY, INFUSE EVERYONE WHO COMES HERE WITH CURIOSITY AND A PASSION FOR SCIENCE, AND INSPIRE YOUNG PEOPLE TO TAKE UP CAREERS IN SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS."

Fabiola Gianotti, CERN Director-General.

Science Gateway is a hub for exhibitions and education laboratories. Science shows are available in English and French in a 400-seat set-up, helping reach more people every day. In addition to the shows, ten different workshops are on offer; to date, 1000+ workshop sessions have been held.

"THIS WILL BE A PLACE WHERE PEOPLE MEET: KIDS, STUDENTS, ADULTS, TEACHERS AND SCIENTISTS, EVERYBODY ATTRACTED BY THE EXPLORATION OF THE UNIVERSE, FROM THE INFINITELY VAST TO THE INFINITELY SMALL. IT IS A BRIDGE, IN BOTH A METAPHORICAL AND A REAL SENSE. THIS BUILDING IS FED BY THE ENERGY OF THE SUN, LANDED IN THE MIDDLE OF A NEWLY GROWN FOREST."

Renzo Piano, chief architect of the project

The project was formally launched in 2018, and the construction of the Science Gateway campus took only two years. This new facility would not have been possible without the generous support of the CERN Science Gateway donors who share CERN's values and, through their contributions, facilitate education and knowledge for the benefit of society.

NMS PHD STUDENTSHIP

2024 marked the official launch of the non-Member State (NMS) PhD Studentship Scheme, which provides young, high-calibre PhD students with the opportunity to participate in the Large Hadron Collider (LHC) experiments, in addition to other scientific and technological activities in the CERN programme.

The scheme offers students in particle physics, applied physics, information technology (IT), computing and engineering from NMS an exceptional opportunity to deepen their knowledge in a truly unique organisation. They get involved in world-famous experiments and accelerator projects of unprecedented scale and scope and bring new skills and a range of expertise back to their home countries and regions.

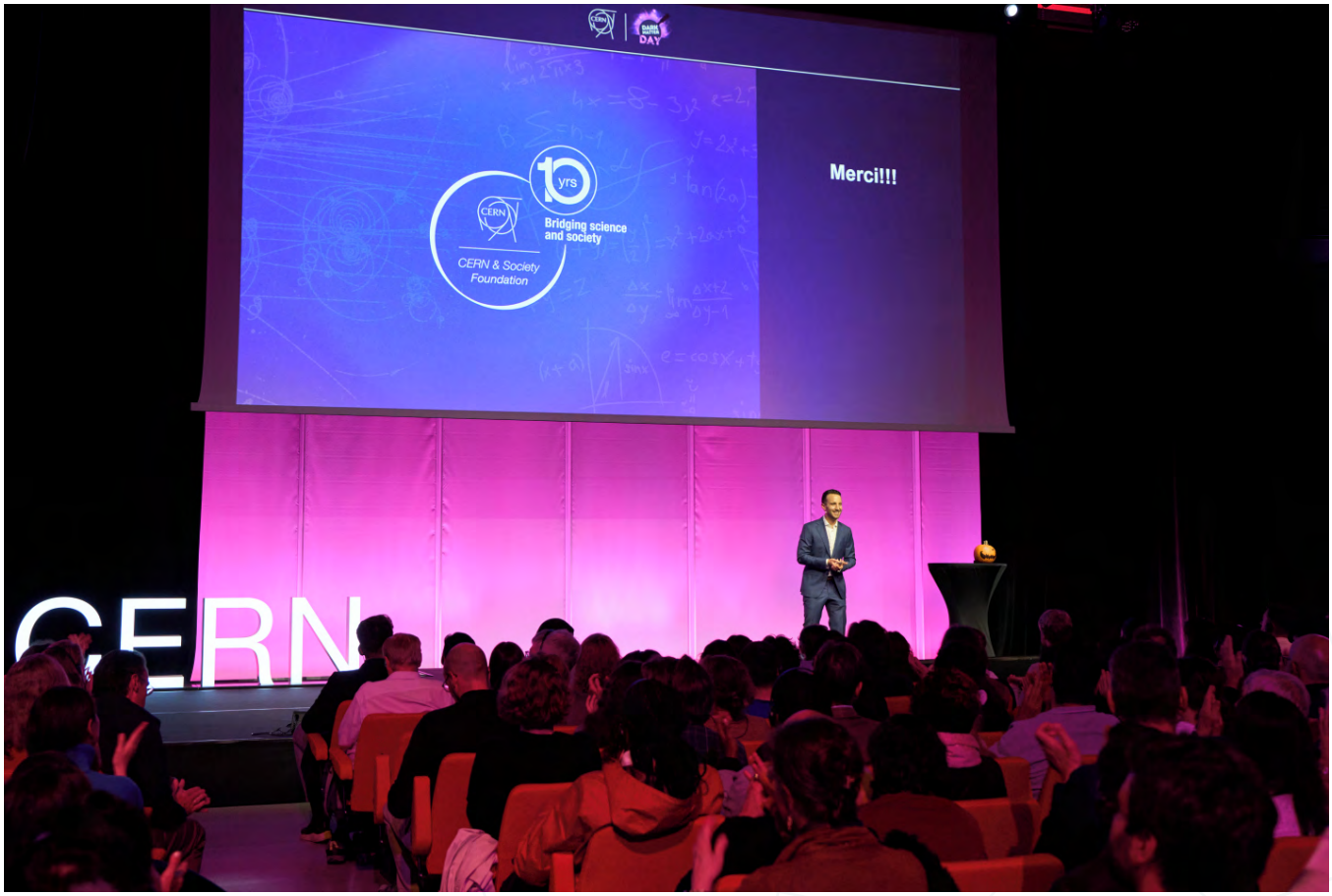
In 2024, five students had the opportunity to commence their PhD journey at CERN through this programme.

The next general call for candidates will open mid-2025 for start dates in 2026.

In the students' words:

"DURING MY UNDERGRADUATE STUDIES, I READ ABOUT DISCOVERIES MADE AT CERN. NOW, THROUGH THE NMS PHD PROGRAMME, MY WORK IS PART OF THAT STORY. FROM CONTRIBUTING TO THE BUILDING OF FUTURE DETECTORS TO ANALYSING DATA, I HAVE HAD THE INCREDIBLE OPPORTUNITY TO COLLABORATE WITH SCIENTISTS FROM ALL OVER THE WORLD, EACH BRINGING UNIQUE IDEAS AND PERSPECTIVES. AS THE MOROCCAN PROVERB SAYS, "DROPLETS OF WATER MAKE A RIVER". EVERY EFFORT, EVERY CHALLENGE, AND EVERY BREAKTHROUGH IN SOLVING MY OWN CONCRETE PROBLEMS HAS HELPED ME GROW AND SHAPE MY JOURNEY."

– Selaiman Ridouani, a PhD student from Morrocco



PUBLIC EVENTS @CERN

Data for 2024:

12
public events

5
supported by the CERN & Society Foundation, engaging **4000 people**

2024 has been a remarkable year for public engagement at the CERN Science Gateway campus, notably highlighting the **70th anniversary of the Laboratory** – a milestone celebrating seven decades of scientific discovery and international collaboration. The CERN Science Gateway campus, which has encompassed the Globe of Science and Innovation since 2023, continued to fulfill its mission of inspiring and educating visitors of all ages and backgrounds.

In this celebratory year, **12 public events** were organized at CERN Science Gateway, of which **5 were directly supported by the CERN & Society Foundation**, engaging around **4000 participants**. These events – ranging from conferences and inspiring talks to artistic performances – sparked curiosity, fostered dialogue and highlighted the importance of scientific exploration.

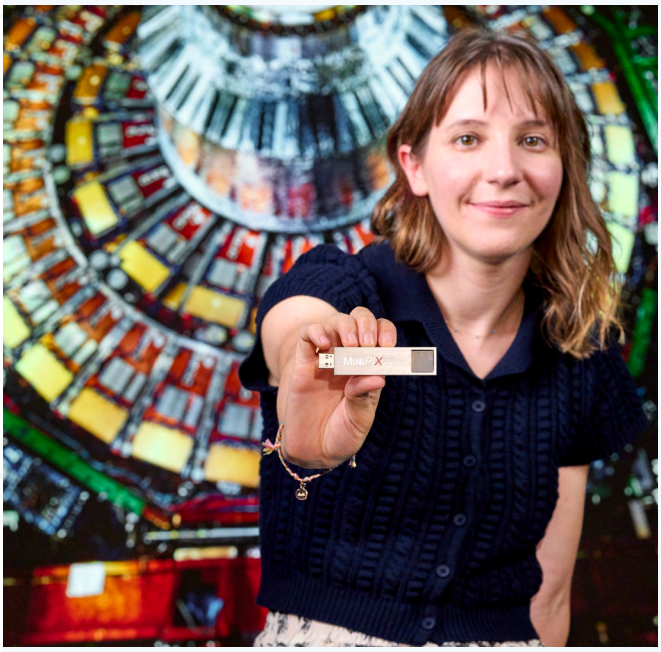
As CERN Science Gateway continues to flourish, so does our commitment to making science accessible and inspiring for all. In a year that celebrated CERN's past, we remained focused on shaping the future – bridging science and society.

TIMEPIX@SCHOOL

Timepix is one of the chips developed by the Medipix Collaborations. The Medipix collaboration has a 30-year legacy of societal impact thanks to various applications of the chips, and now CERN has launched an initiative to make Timepix more widely available in high schools. The Timepix kit chip has been used in several successful pilot projects in schools, to be sure that it meets the needs of its users: students.

"FOR MANY HIGH-SCHOOL STUDENTS, ESPECIALLY THOSE FROM LOW-INCOME OR MINORITY BACKGROUNDS, IT'S OFTEN DIFFICULT TO SEE THE VALUE OF STUDYING STEM SUBJECTS. THIS PROJECT PROVIDES THEM WITH LEADING-EDGE HARDWARE THEY CAN USE IN THEIR CLASSROOMS – THE SAME DEVICE USED IN SPACE, IN HOSPITALS AND IN MUSEUMS."

Michael Campbell, Medipix and TIMEPIX@school project leader



Natural forms of background radiation are always present in every environment. We are constantly hit by cosmic rays – particles produced by stars or black holes – that travel through us every minute. Even the dust all around us can be a source of radioactivity. It can be difficult to understand radiation and how impactful it can be as a tool.

This small particle detector developed at CERN can "see" radiation by capturing images of invisible particles, just like a camera captures light. Scientists use it in space, medicine, and research to monitor radiation and study tiny particles. Now, Timepix is being brought into classrooms so students can explore real-world physics through hands-on experiments. It makes science exciting by turning abstract concepts into something students can see and interact with!

In the students' words:

"TO HAVE ACCESS TO SUCH EXCITING TECHNOLOGY THAT ENABLED US TO BE PART OF GENUINELY IMPACTFUL EXPERIMENTS WAS SO EMPOWERING. ASIDE FROM THE EXCITEMENT OF LEARNING CONCEPTS THAT WENT WELL BEYOND THE CURRICULUM, IT ALSO GAVE ME AND OTHERS CONFIDENCE IN OUR ABILITY TO LEARN, RESEARCH AND SHARE IDEAS THAT WE WOULD CERTAINLY NOT HAVE HAD OTHERWISE. TO HAVE THAT CONFIDENCE BUILT AT THAT AGE STOOD ME IN GREAT STEAD AS I WAS MAKING DECISIONS ABOUT MY FUTURE. NOT ONLY WAS I INSPIRED BY ALL OF THE FASCINATING SCIENCE THAT I LEARNED THROUGH THE EXPERIMENTS THAT WE WERE ABLE TO CONDUCT WITH TIMEPIX, BUT I FELT THAT MY PEERS AND I COULD REALLY, MEANINGFULLY CONTRIBUTE. IT WAS A COMPLETELY UNIQUE EXPERIENCE, AND I AM VERY GRATEFUL."

Anna, TIMEPIX@school pilot high-school user, now working in data analysis

ZENODO

Zenodo was born at CERN with the European Union's OpenAIRE project to address the need to make the publishing, sharing and long-term stewardship of scientific data and software a reality for all researchers. Zenodo taps into CERN's long-standing tradition and know-how in sharing and preserving scientific knowledge for the benefit of all. The scientific community now has the opportunity to store their data in a non-commercial environment that is freely available to society at large.

Zenodo is already capable of accommodating the needs of modest data sets, but this is just a fraction of the overall need for data services in the scientific field. Donation support is crucial for expanding Zenodo's features and storage capabilities.

In March 2024, the EU and CERN officially launched the EU Open Research Repository on Zenodo in a pilot phase and, since then, it has rapidly gained momentum. Over the past several months, Zenodo has successfully onboarded 130 EU-funded projects as EU projects communities – a feature that provides projects with an easy, go-to solution for sharing and preserving the research outputs from their projects. About 23% of all EU-funded projects (FP7, Horizon 2020 and Horizon Europe) carried out during the past ten years, amounting to 11 000 different grants, have research output on Zenodo.

As we now move from the pilot to the production phase, the EU Open Research Repository is set to become an essential tool for EU projects, offering an easy, accessible platform to support the broader implementation of EU open science policies.

CULTURE AND CREATIVITY

ARTS AT CERN

The Arts at CERN programme enables artists to come to CERN for a residency and interact with scientists to nourish their artistic practices. The programme also supports art productions. Some of them are exhibited in the "Exploring the Unknown" space of CERN Science Gateway. This exhibition space manifests as a fertile meeting ground where art and science enter into dialogue, a conversation initiated by Arts at CERN a decade ago.

In 2024, new art commissions were Tania Candiani's video essay HUM, Patricia Domínguez's film Tres lunas más abajo (Three Moons Below) and AATB's installation A Particular Score, which is located at the CERN Community Support Centre.

"FOR ME, IT IS IMPORTANT TO APPROACH ALL THE REALMS EXPLORED COLLABORATIVELY AT CERN THROUGH AESTHETICS BECAUSE IT CAN BE THE BRIDGE BETWEEN SCIENCE AND SOCIETY, AS WELL AS A WAY FOR US, AS CITIZENS, TO PARTICIPATE IN IT WITH OUR THOUGHTS. AESTHETICS ENABLES PEOPLE TO OPEN UP THEIR MINDS, TO HAVE THEIR OWN ASSOCIATIONS, OPINIONS AND MEANINGS AND TO HAVE NEW IDEAS."

Johanna Bruckner, Swiss artist in residency at CERN

2024 brought many reasons for celebration as Arts at CERN was awarded the European Commission's S+T+ARTS Grand Prize for Innovative Collaboration and celebrated the inaugural CERN Art and Science Summit "Uncertainty" as part of CERN's 70th anniversary. Arts at CERN also launched Resonance, a new arts collaboration and residency programme in collaboration with the Republic and Canton of Geneva and the City of Geneva.

In 2024, no fewer than 15 artists came to CERN as resident or guest artists. The Arts at CERN programme is open to artists from all disciplines who are interested in the crossovers between art, science, technology and society. During their residency, the artists engage in artistic research and exploration, in dialogue with physicists, engineers and other members of the CERN community. This period may be followed by a phase to conceptualise a new production, with curatorial support from teams in Geneva and in CERN's partner institutions. The resulting artwork may also be showcased in partner institutions.

In 2024:

15	+350	3
Artists involved	Scientists involved	Art commissions

EXPLORING THE UNKNOWN

Set in the dynamic environment of CERN Science Gateway, “Exploring the Unknown” is more than an art–science exhibition; it is a space that bridges the gap between the known and the unknown, prompting reflection on some of the most profound and universal questions.

The project is designed to explore three main themes – Space and Time, the Void (the Quantum Vacuum), and the Invisible (Dark Matter) – and uses art as a means of expressing and exploring the creativity that is awoken when one contemplates the Universe.

Each commissioned artwork is loaned to CERN for a three-year period before being returned to the artist. The artworks will then be exhibited in other venues, providing increased exposure and reaching new audiences.

In autumn 2023, CERN installed the first series of artworks commissioned specifically for Science Gateway. Four artists, all former residents of Arts at CERN, were selected to create new works for the opening exhibition: Julius von Bismarck and Benjamin Maus (DE), Ryoji Ikeda (JPN), Chloé Delarue (CH) and Yunchul Kim (KOR). They interacted with scientists, visited the Laboratory and conducted research on the exhibition’s themes.

CERN has already chosen the first artist to be commissioned in the next iteration of “Exploring the Unknown” in 2026: Rosa Barba, a German–Italian artist based in Berlin, who will create a new and impressive installation inspired by the themes of the Invisible and Dark Matter.

YOU MAKE GREAT THINGS HAPPEN!

In these pages you have discovered some of our projects that benefit society as a whole and make a profound impact on lives of numerous individuals. There are many ways to support CERN & Society initiatives, to make a difference for our future:

- **MAKE A GIFT**
  You may choose to support CERN & Society initiatives via earmarked donations or make an unrestricted donation that can be used to support the immediate and pressing needs of our projects. We accept payments by credit card, PayPal, cheque or wire transfer.
  Visit our website:
  https://cernandsocietyfoundation.cern

- **GRANTS AND SPONSORSHIPS**
  Foundations, companies and other organisations can help us leverage the benefits that science has on society by collaborating with us in a joint venture or by entrusting us with the necessary resources to enlarge the impact of CERN & Society projects.
  Contact: partnerships.fundraising@cern.ch

- **RENT THE GLOBE**
  Individuals, companies and other organisations can rent the Globe of Science and Innovation for their private events. The Globe is a unique and remarkable venue that is able to accommodate up to 300 people and is fully equipped for meetings, conferences, cocktail parties and dinners. 100% of the revenue from renting out the Globe goes to CERN & Society projects.
  Contact us to schedule your event:
  partnerships.fundraising@cern.ch

- **VISIT THE CERN SCIENCE GATEWAY SHOP**
  If you happen to be close to CERN, why not pay a visit to the CERN Science Gateway gift shop? It is an amazing place where you will even find authentic CERN data tapes that would make an original gift or a souvenir of your visit. 100% of the revenue from the data tapes purchase will be used to support CERN & Society projects.
  Check the shop's opening hours: https://visit.cern/shop

- **MAKE AN IMPACT BEYOND YOUR LIFETIME**
  You can also consider supporting the CERN & Society Foundation in your personal estate planning. With legacies and bequests, you can pass on your values to the next generation. Contact: partnerships.fundraising@cern.ch

- **SPREAD THE WORD**
  Raising awareness of our mission and work is also a great way to support us. Do you frequently use social media like Facebook or LinkedIn? Then follow us, like and share our posts to give more visibility to our projects and spread the idea of using science for the benefit of society. Join our community!

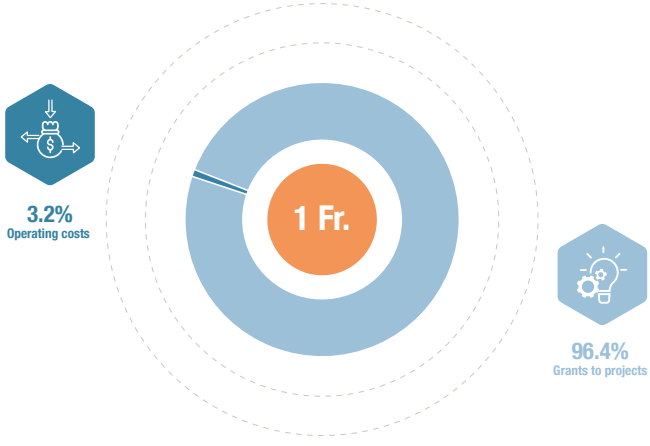
  CERN & Society Foundation – 5K+ followers

  CERN & Society Foundation – 31K+followers

OPERATING COSTS

CERN provides the majority of the resources needed to operate the CERN & Society Foundation.

Over 99% of all donation support benefits the CERN & Society projects and initiatives directly. Unless otherwise agreed with the donor, only a small fraction of unrestricted donations is used to cover the cost of processing contributions received by credit card or PayPal and other operating expenditure. Otherwise, all funds benefit projects directly and increase their impact.



CERN & SOCIETY FOUNDATION BOARD

Michel Spiro,
Chair of the Foundation Board,
President of the International Union of Pure and Applied Physics - IUPAP (2018-2024)

Daphné de Laleu, Vice-Chair of the Foundation Board
Senior Partnerships Manager – Foundation Programme Lead, Audemars-Piguet, Switzerland

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CERN Director-General

Fido Dittus, member of the Foundation Board,
Former ATLAS experiment Resources Coordinator

Jean-Marc Triscone, member of the Foundation Board,
Professor of Physics in the Department of Quantum Matter Physics at the University of Geneva

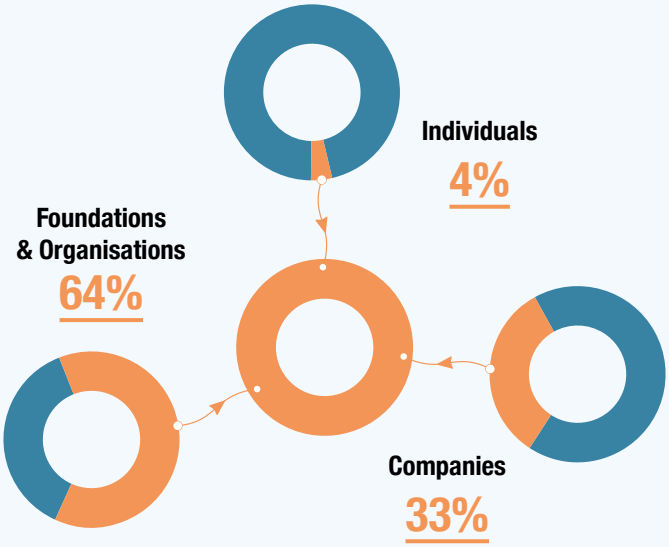
Eric Cornuz, member of the Foundation Board
Mayor of Meyrin, Republic and State of Geneva (2024-2025)

FINANCES

TOTAL AMOUNTS RAISED

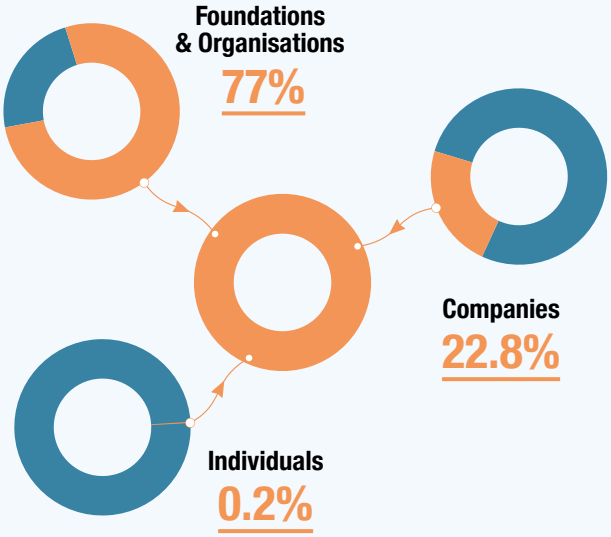
CERN & Society Projects

2 580 082 CHF



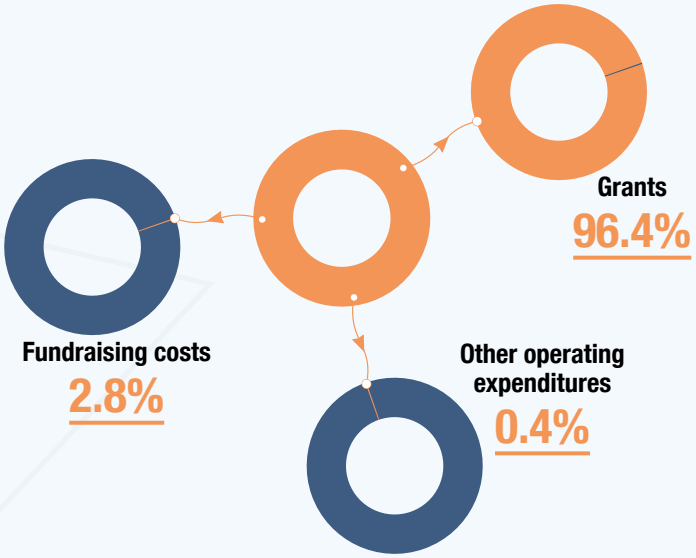
Science Gateway capital campaign

603 974 CHF



TOTAL EXPENDITURE

3 883 500 CHF



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Partnerships & Fundraising

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We look forward to getting to know you.

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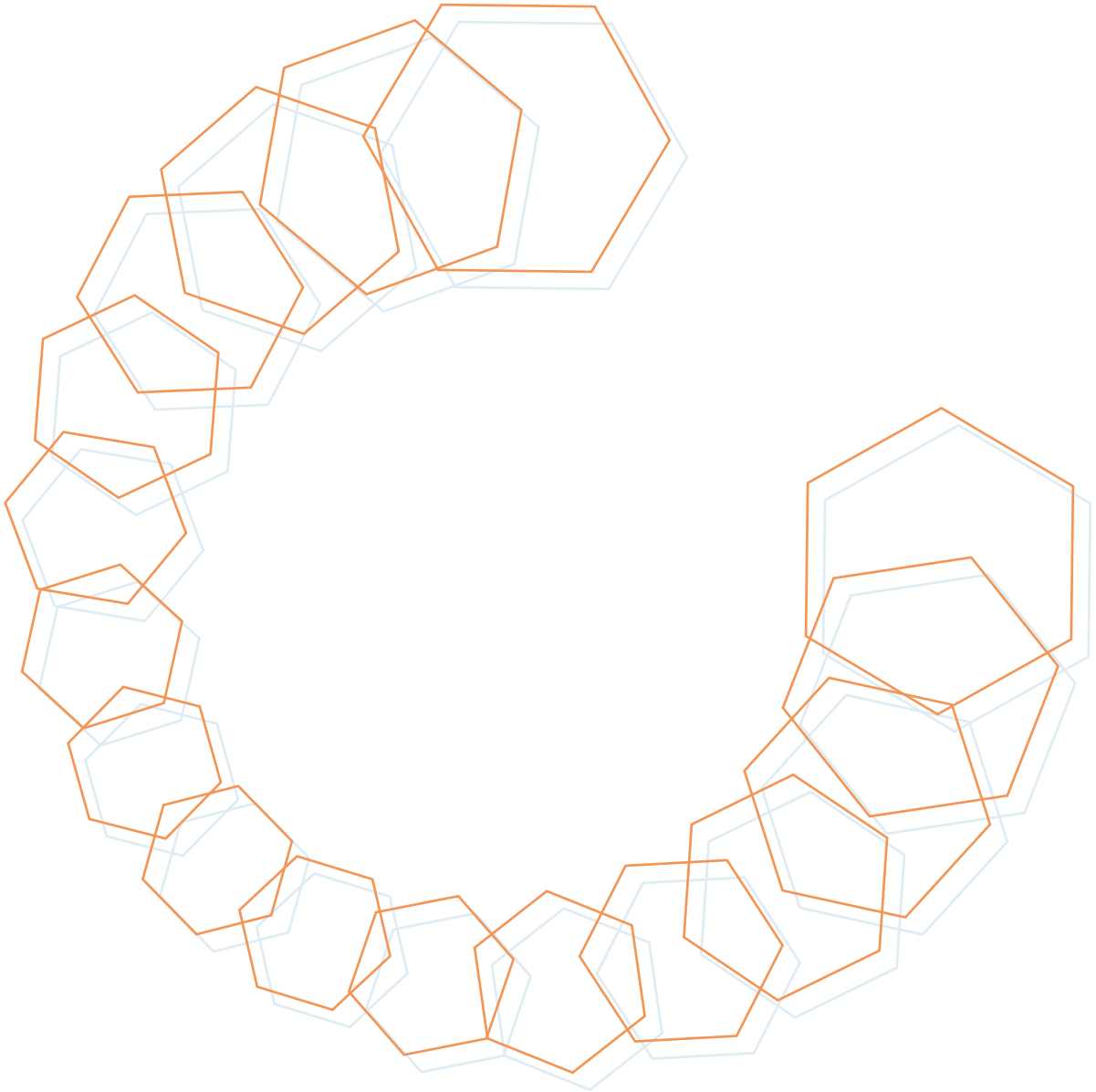
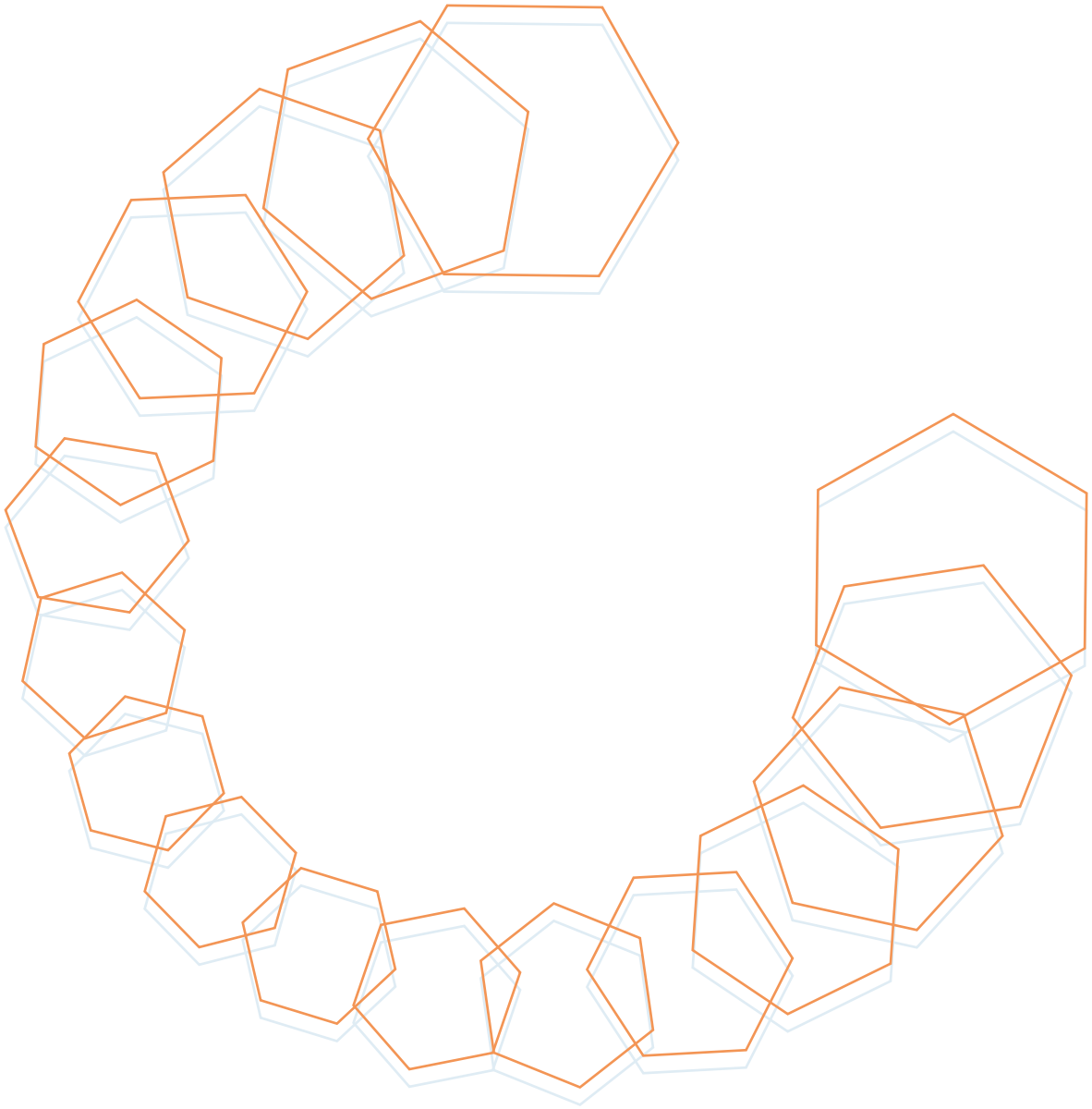
CERN: all other images





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