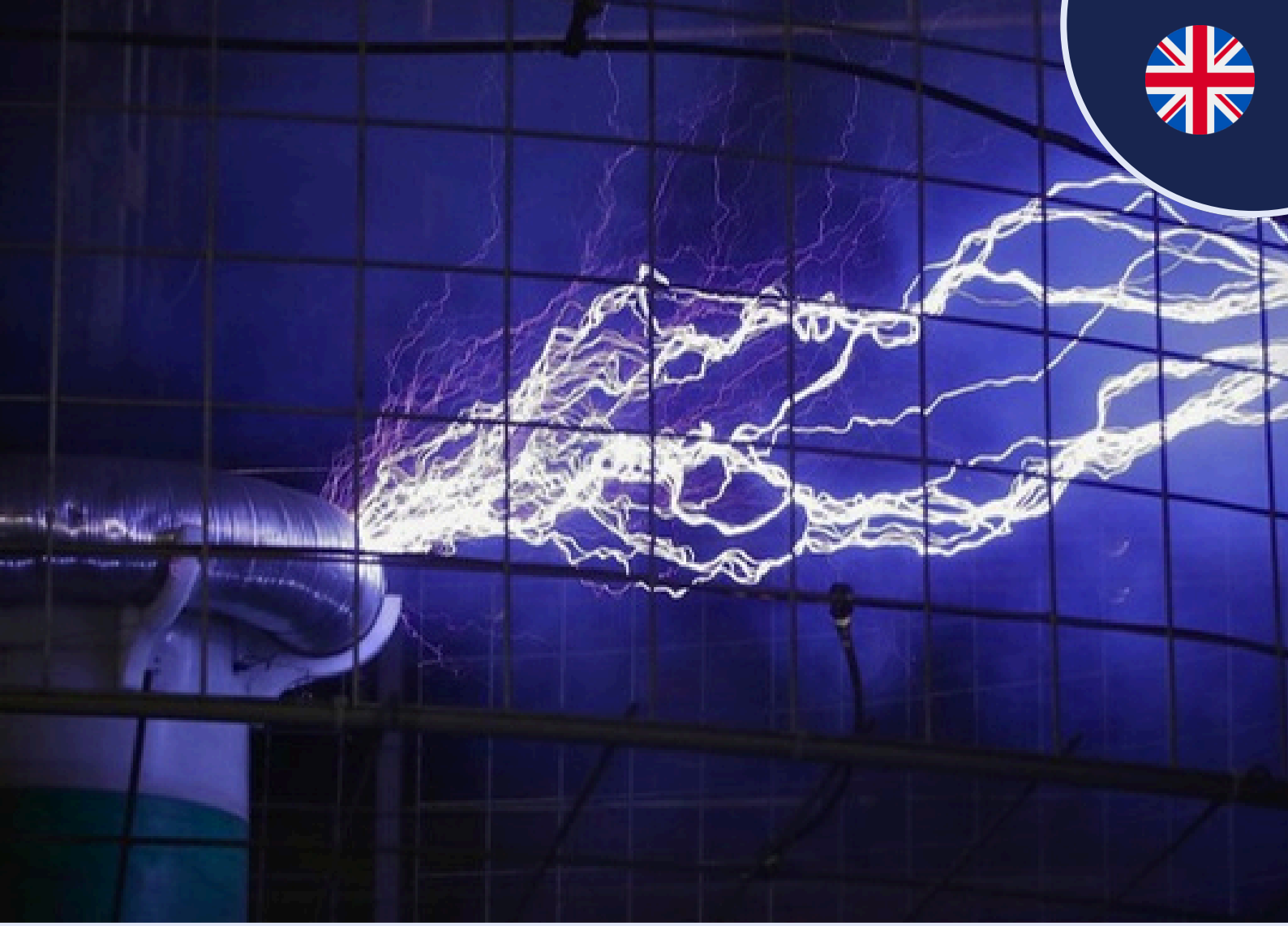
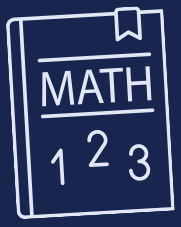
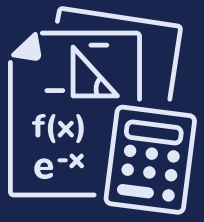


LUXEMBOURG SCIENCE CENTER

GROUP OUTINGS





PRIMARY SCHOOL

HIGH SCHOOL

LEISURE GROUPS

WHO ARE WE?

The LSC - Luxembourg Science Center is a fun and entertaining discovery centre, located in Differdange and entirely dedicated to science and new technologies

Since it opened in 2017, the LSC has proved to be a valuable asset and a key partner in Luxembourg's education system. It offers educators and teachers access to a collection of exceptional tools and experimental stations that make the subjects studied in class more accessible.

It has also become a popular venue for visits by a wide range of groups: the general public, Maison Relais, youth centres, scouts, company groups, senior citizens, medical-educational institutes, etc.

Today, the LSC welcomes almost 70,000 visitors a year.

'Science and technology are often approached in an overly abstract or academic way.

That's why we put theory into practice with a fun, interactive approach that appeals to audiences of all ages.

The LSC offers the chance to 'grasp' science and technology by touching, playing and experimenting, while learning new things.'

WHY VISIT THE LSC?

PRIMARY SCHOOL

The Luxembourg Science Center can not only provide teachers with the resources they need to cover science topics in an interactive and engaging way with their pupils, but it can also offer the opportunity to discover new subjects that are impossible to cover in a classroom or for which teachers do not have the materials or time.

HIGH SCHOOLS

The Luxembourg Science Center's offering is also optimised for secondary education, with a concentration of extraordinary investigation and demonstration tools that would be impossible to deploy in every secondary school in the country, and a selection of unique multilingual shows.

The shows are designed to complement each other and to fit in with the school curriculum. We show practical applications and associate concepts with emotions to facilitate understanding.

LEISURE GROUPS

The Science Center offers a unique platform for visitors of all ages and profiles who want to discover science through all their senses...

Since its opening in 2017, the Luxembourg Science Center has proved to be a popular venue for group visits of all kinds:

Maison Relais, Youth centres, Scouts, Corporate groups, Groups of friends, Seniors, Medical-educational institutes...

THE EXPLORATION ROOM

In our large exploration room, the scientific adventure comes to life through a hundred or so interactive stations, each more fascinating than the last. Each station invites young and old to experience, touch and understand the wonders of science and new technologies, in a fun and immersive way.

Whether you're with family, friends, a school or a company outing, this unique experience is designed to amaze, surprise and arouse the curiosity of everyone. Come and experience science like never before!

THE SCIENCE SHOWS

In addition to our large exploration room, the Luxembourg Science Center offers a wide selection of exciting science shows, covering subjects as varied as electricity, astronomy, chemistry, physics and much more. What makes our shows unique?

They are hosted by passionate science mediators, who adapt the content to suit the audience. Whether you're a primary school, a secondary school group or simply curious about science, our experts will make every demonstration dynamic, accessible and rewarding.

PRACTICAL INFORMATIONS

- The stations are equipped with touch screens offering descriptions in five languages.
- Our stations are height-adjustable, guaranteeing optimum accessibility for all.
- Access to shows only from age 6. Except "Kitchen Lab", from 8 years old and supplement 6,5€ per person.
- Lasting an average of 60 minutes, our shows are available in four languages

HOW TO BOOK?

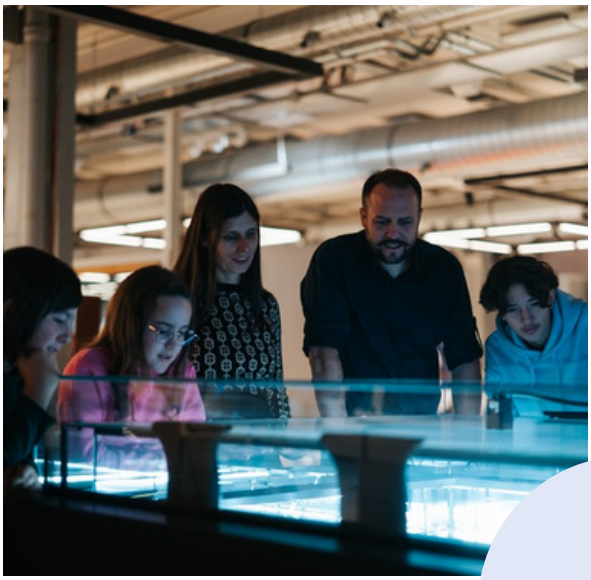
www.science-center.lu

ONLINE RESERVATION FORM

Please visit www.science-center.lu → BOOKINGS (Schools or Groups) and fill out the online reservation form.

All bookings are subject to availability!

Otherwise, if you need assistance, please do not hesitate to contact us by email: reservations@science-center.lu or at the following number: 00352 28 83 99 1



PRICES - SCHOOL OR HIGH SCHOOL

The LSC is FREE for school groups from Luxembourg's public education system!

There's a fee for private and non-Luxembourg schools:

- Group leader: 1 free ticket per 25 students. (E.g.: 52 participants = 2 free tickets for accompanying adults)
- Group price: €7 per person
- 1 show per person included in the price (ages 6 and up)

PRICES - LEISURE GROUPS

Group rates only apply from 15 participants!

- Group leader: 1 free ticket per 25 participants (E.g.: 52 participants = 2 free tickets for accompanying adults)
- Group price:
  €15,5 Adults
  8€ children
  FREE for children < 6 years old
- 1 show per person included in the price (ages 6 and up)

ADDITIONAL CHARGES - APPLICABLE TO ALL

Including Luxembourg public schools

- KITCHEN LAB, ages 8 and up, €6,5 extra per person
- Additional show per participant = €4,5 supplement per person

FREQUENTLY ASKED QUESTIONS

Q What does a typical visit involve?

A Participants begin with a self-guided tour of our large exploration room (nearly 100 interactive stations). They then attend the Science Show of their choice (see list on the next page). A show lasts an average of one hour. The visit usually ends with a second exploration session.

Q Do you have a picnic area?

A Yes, we have a dedicated space (capacity: 50 people). If you plan to use it, please check the box on the form. Please note that for more than 50 participants, we can always arrange for the group to rotate.

Q What about the billing?

A Upon receipt of the reservation form, we will send you a detailed offer. You can confirm your visit at that time. On the day of your visit, you can pay directly at the cash register or request an invoice, which will be sent to you in the days following your visit.

Discover science differently!

An experience accessible to all.
Touch, marvel, understand.
Together, experience science differently.

LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Éducation nationale,
de l'Enfance et de la Jeunesse

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FONDATION

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SPACE AGENCY

esa
EUROPEAN SPACE AGENCY

SCIENCE SHOWS

Duration: 1h

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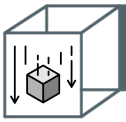
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Activities designed exclusively for Luxembourg secondary schools.

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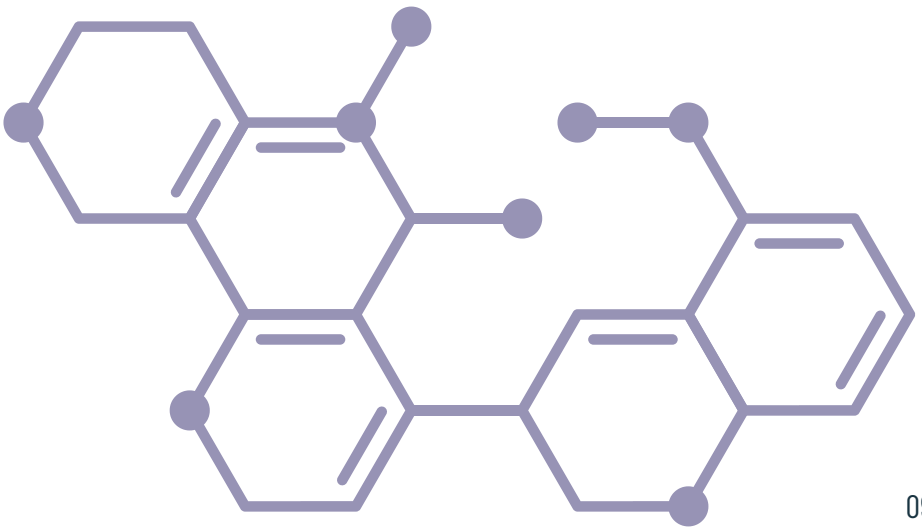


FLUIDS

From 6 years old
Max. 50 people
Duration 1h

MOLECULES IN MOTION

In the fluids laboratory, you will be working with substances at extremely low temperatures. This will familiarise you with molecular agitation and the basic principles of the thermodynamics of changes of state. Amazing experiments will enable you to separate and visualise the different components of air, all of which are colourless, odourless and tasteless...

- Cryogenics
- Liquid nitrogen
- Dry ice
- Fragilisation of materials by cold
- Leidenfrost effect
- Liquefaction of air
- Sublimation
- Changes of state
- Evaporation
- Absolute zero
- Supercritical fluid
- Triple point

ELECTRICITY

From 6 years old
Max. 70 people
Duration 1h

HIGH VOLTAGES

From the static electricity of everyday life to the giant lightning bolts of thunderstorms, we'll be taking part in spectacular and instructive demonstrations. The various manifestations of electricity on our scale will be reduced to the fundamental interaction between electric charges. An ideal show to introduce electromagnetism, electronics and electrical engineering.

- Electricity by friction
- Electrical horripilation
- Spike and lightning rod effect
- High voltage generator
- Van de Graaff / Tesla generator
- Jacob's ladder
- Faraday cage
- Capacitor
- Influence load
- Tourniquet / Nollet chain
- Fluorescent tubes
- Giant plasma ball

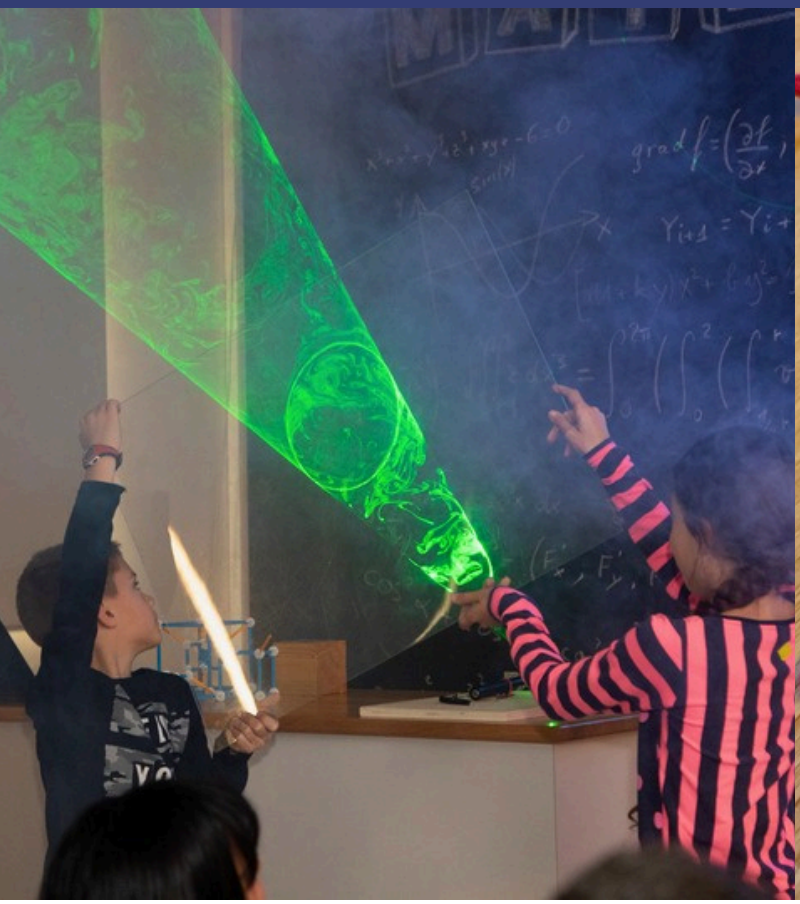
DID YOU KNOW??

There is a version of this show that is specifically tailored to the curriculum for 2e/3e C or B.

See page 32 for more information

MATHS

From 6 years old
Max. 50 people
Duration 1h



HIDDEN DIMENSIONS

On the trail of hidden dimensions!
Using lights and shadow effects, we'll reveal the secrets of geometry: from flatness in dimension 2 to twisted spaces in higher dimensions!

- Shadows and projections
- Geometry in space
- Hypercube and dimension 4
- Planetary motion and conics
- Art of Science

TWISTED KNOTS AND KNOTTED HOLES

In this interactive show, we enter the wonderful world of topology. We'll take an in-depth look at shapes and see what similarities there are between them. We will also enter the fascinating science of knot theory.

- Topology
- Euler-Descartes formula
- Möbius loop
- Knot theory
- Tricolorability

MAGNETISM

From 6 years old
Max. 30 people
Duration 1h

THE INVISIBLE FORCE OF MAGNETS

An introduction to magnetism and classical electromagnetism will be presented using a collection of natural or synthetic magnets, and above all a giant electromagnet that operates at 500 Amps. This one-of-a-kind instrument will enable you to visualise a number of astonishing phenomena (levitation, damped pendulum, 2.5 tonne pole pieces, 1.6 Tesla field, etc.). A perfect show to grasp the basics of the interaction between currents, fields and movements.

- Helmholtz electromagnet
- Compass and terrestrial magnetism
- Spectrum and magnetic field
- Electricity generation by induction
- Tesla egg
- Electric motor
- Alternator
- Laplace rail
- Eddy currents
- Ferro-, para- and diamagnetism
- Ferrofluids
- Electric guitar

DID YOU KNOW??

There is a version of this show that is specifically tailored to the curriculum for 2e/3e C or B.

See page 32 for more information

CHEMISTRY

From 6 years old
Max. 50 people
Duration 1h

GIANT MOLECULES

Polymers are giant molecules that have invaded our everyday lives, and not just in the form of plastics. Where are they found? How are they synthesised? What are their chemical properties? Are all polymers plastics? All this will be revealed through fascinating and impressive experiments.

- Polymer structure
- Natural and synthetic polymers
- Synthesis of nylon
- Superabsorbent
- Tyres
- Disc
- Fire-resistant clothing

FIRE AND FLAME

What is luminous and can be rekindled or quenched with water? FIRE! Looking into the heart of the flames, a million questions arise: Where does the heat come from? Why are the flames shaped like that? Why are they yellow? Can you change their colour? On this journey through the history of candles and fireworks, we'll rekindle your love of chemistry! Forget dragons, come and see some real fire-eaters!

- Oxidation reaction
- Combustion: organic matter vs. metals
- Fire triangle
- Extinguishing various fires
- Fireworks
- Rockets

ARE SOLUTIONS THE PROBLEM?

We'll shake up some spectacular cocktails (the kind you definitely shouldn't drink), to illustrate these core principles of chemistry. Find out what kind of compounds are found in everyday life, and which of them need to be handled with care!

This show explores the interaction of acids and bases and how they can create colourful solutions and powerful reactions. Mixing different chemicals reveals how some compounds easily dissolve into water, while others prefer to firmly stick together.

- Acid-base reactions
- Indicators & pH
- Solubility
- Precipitation
- Polarity
- Safe handling of cleaning products
- Density

OPTICS

From 6/12 years old
Max. 44 people
Duration 1h

FROM LIGHT TO RAINBOW

How many colours are there in a rainbow? Why are all cats grey at night? What are the colours of the invisible? Following in the footsteps of Hooke, Newton, Young, Dalton and Maxwell, we will unveil some of the mysteries of light.

- Additive and subtractive colour synthesis
- Electromagnetic spectrum
- Prism
- Spectroscopy
- Invisible light (infrared, ultraviolet)
- Fluorescence/phosphorescence
- Colour vision
- Optical illusions
- Lasers

THE HIDDEN LIFE OF LIGHT (AGE 12+)

The simple question “What is light?” has puzzled the world’s greatest scientists for centuries. The answer forces us to stretch the limits of our imagination, but it also rewards us with a deep understanding of matter.

What’s more, we will demonstrate our electron microscope, an invention closely linked to this subject and discover the fascinating world of the extremely small.

- Crookes tube
- Wave interference
- Photoelectric effect
- Wave-corpuscle duality
- Electromagnetic lens
- Electron microscopy

DID YOU KNOW?

There is a version of this show that is specifically tailored to the curriculum for 6e C

See page 31 for more information

ACOUSTIC

From 6 years old
Max. 50 people
Duration 1h

SONOROUS VIBRATIONS

What is sound and where does it come from? Why can't anyone hear you screaming in space? Can you change the speed of sound? How does our hearing work, and how did Beethoven adapt to deafness? These are just some of the mysteries of sound and silence that we will be unveiling in our anechoic (echo-free!) acoustics room.

- Longitudinal and transverse waves
- Vacuum bell
- Tuning fork collection
- Spectral analysis
- Singing bowls
- Lissajous figure
- Giant ear
- Hearing with age
- Speed of sound
- Interference
- Musical instruments

DID YOU KNOW?

There is a version of this show that is specifically tailored to the curriculum for 6e C

See page 31 for more information

BIOLOGY

From 6 years old
Max. 50 people
Duration 1h

KNOW YOUR BRAIN

How did the brain develop and do all living things have one? How does the brain work and how do neurons work together to control the whole body? Why do we have two cerebral hemispheres and why are they so extraordinarily structured? Our journey through neurobiology will answer many of these questions! What's more, we look inside your head and try to trick your brain.

- Evolution of the brain
- Anatomy of the brain
- Brain development
- Neurons and synapses
- Action potentials
- Brain waves
- Cerebral metabolism
- Shock trauma
- Electroencephalogram
- Mindball game
- Illusions

From 6 years old
Max. 21 people
Duration 1h

PLEASE NOTE: As a special exception, these two shows will be presented in our planetarium. A maximum of 21 seats are available.

ANATOMICAL EXPLORATION

Through a spectacular immersion into the heart of the human body, this fascinating journey offers a better understanding of the essential mechanisms of life. Seated in the planetarium, visitors will be plunged inside their own anatomy to discover its secrets in a visual and interactive way.

- The Nervous System
- The Bones
- The Muscles
- Digestion
- The Respiratory System
- The Eyes
- The Skin

SMALL CELL, BIG WORLD

Discover the fascinating world of cells, the fundamental units of life. This show explores the essential mechanisms that allow cells to function and organisms to live. Dive into the microscopic world, uncover the secrets of DNA and genetics, and explore the fascinating complexity of life.

- Animal / plant cells
- Microscopic
- Organelles
- DNA
- Genetic decoding
- Proteins

PROJECT - MISSION BIOMEDICALE

In addition to these two shows, an exclusive workshop was also organized.
See page 30 for more information

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andrē losch FONDATION

PLANETARIUM

From 6 years old
Max. 21 people
Duration 1h

SHOW :

PLANETS AND CONSTELLATIONS

Under a 6-metre dome, a scientific mediator will show you the day's sky using a high-resolution projector. You'll explore celestial mechanics and the remarkable phenomena of the day, before taking an immersive journey into the Solar System. Would you prefer to fly over the moons of Jupiter, dive into the rings of Saturn or land on an extinct Martian volcano?

- Celestial mechanics
- Astronomy of position
- Constellations
- Zodiac
- Solar system
- Comparative planetology
- Telluric planets
- Gas giant planets

SHOW :

ASTEROIDS WITHIN REACH

Travel through the stars and discover all the secrets of asteroids and comets, the celestial fragments that bear witness to the formation of our solar system. The public will also have the unique opportunity to touch samples of stars from space!

- Shooting stars
- Meteors
- Meteorites
- Comets
- Real pieces of asteroid
- Piece of the moon
- Piece of Mars

From 6 years old
Max. 21 people
Duration 30min

FILM (30min) :

THE HOT, ENERGETIC UNIVERSE

Using immersive visualisations and real images, we present the achievements of modern astronomy, the most advanced terrestrial and orbital observatories, the basic principles of electromagnetic radiation and the natural phenomena associated with high-energy astrophysics.

FILM (30min) :

THE UNIVERSE THROUGH THE TELESCOPE

Original title 'Two Small Pieces of Glass - The Amazing Telescope'.
This film tells the story of the telescope, from Galileo's modifications of a child's telescope using two small pieces of glass, to the most recent astronomical observation instruments.

FILM (30min) :

FROM THE EARTH TO THE UNIVERSE

A fabulous journey through space and time presents, through a striking combination of images and sounds, the Universe as revealed by science.

MECHANICS

From 6 years old
Max. 25 people
Duration 1h

FREE FALL INTO THE WORLD OF GRAVITATION

This show is all about gravity—a force that has fascinated humanity for centuries. Renowned philosophers and scientists, from Aristotle and Galileo to Newton and Einstein, have all asked themselves the same questions: What is gravity? How does it affect us and the objects around us?

With our show on gravity, we want to get to the bottom of these questions by putting objects into free fall. Plus, some of our experiments come with a surprise or two, where objects don't necessarily fall to the ground the way you might initially expect. Could there be other forces at play?

- Aristotle
- Galileo
- Newton
- Free fall
- Air resistance
- Center of mass
- Equilibrium of forces
- Cavendish experiment

NEW!

KITCHEN LAB

From 8 years old
Max. 20 people
Suppl. 6,5€ p,p
Duration 1h

WORKSHOP: Sugar and Energy

In this workshop you will discover and taste several types of sugars and sweeteners. Get ready to get your hands dirty by experimenting with yeast... will you be able to demonstrate which sugar is the yeast's favourite? And don't forget, everyone will prepare and leave with their own smoothie made from natural ingredients. Enjoy!

- Sugar & sweeteners
- Yeast
- Sugar digestion
- Culinary biochemistry
- Metabolism
- Food additives (E codes)
- Microorganisms

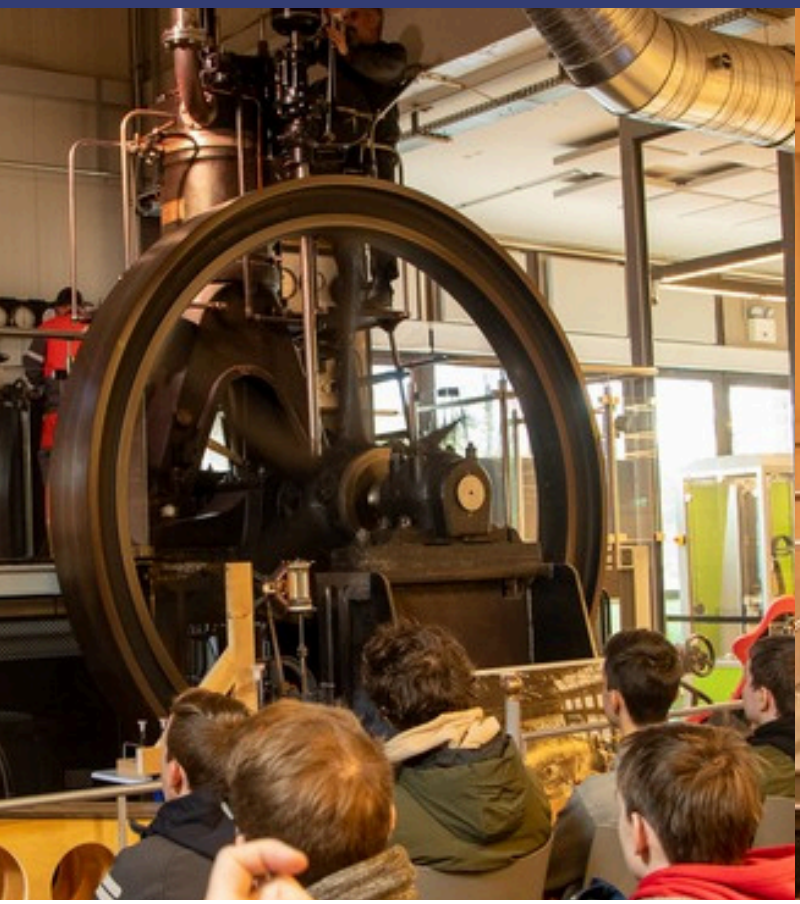
DID YOU KNOW?

There is a version of this show that is specifically tailored to the curriculum for 6e C

See page 31 for more information

MOTORS

From 6 years old
Max. 30 people
Duration 1h



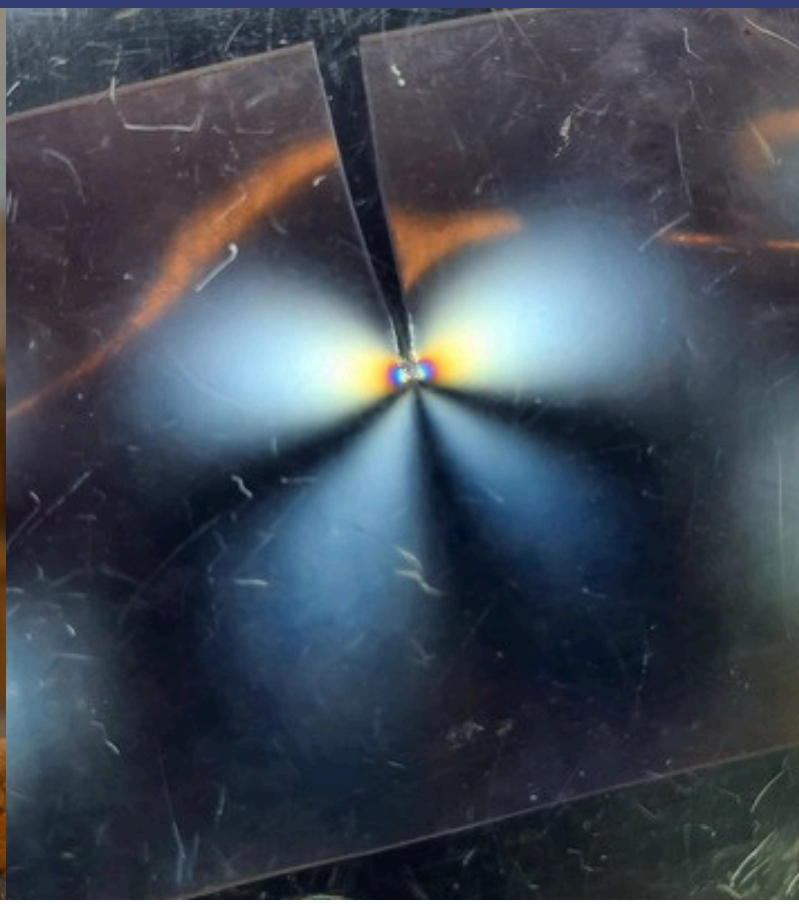
DIESEL

A number of demonstrations will give you an insight into the inner workings of the internal combustion engine, invented by Etienne Lenoir (1822-1900) of Luxembourg. In particular, you will witness the start-up of an 11-tonne 1907 diesel engine (DEUTZ), which has been completely renovated and once belonged to the Grand Duke. A unique heritage experience!

- Petrol vs Diesel
- Stationary engines
- 4-stroke cycle
- Transparent piston
- Connecting rod-crank system
- Flywheels
- Oil distillation
- Self-ignition
- Injection and fireball

MATERIALS

From 6 years old
Max. 25 people
Duration 1h



IRON & STEEL

In a semi-professional workshop packed with machine tools, you'll discover the physical and chemical properties of the most stable atom in the universe: iron. An abundant, easily alloyed and recyclable metal, it has shaped the history of the Minett Region. You'll see what makes iron different from steel, from the medieval forge to the 3D metal printer: welcome to Differdange, the City of Iron...

- Induction forging
- Celtic metallurgy
- Combustion vs oxidation
- Corrosion
- Iron reduction (thermite)
- Tempering / annealing colours
- Hardening by quenching
- Leidenfrost effect
- Soft iron vs high carbon steel
- Ferrous meteorites
- Geology of the Minett region
- Ore, coal, slag
- Iron vs cast iron vs steel
- 3D metal printer
- Curie point

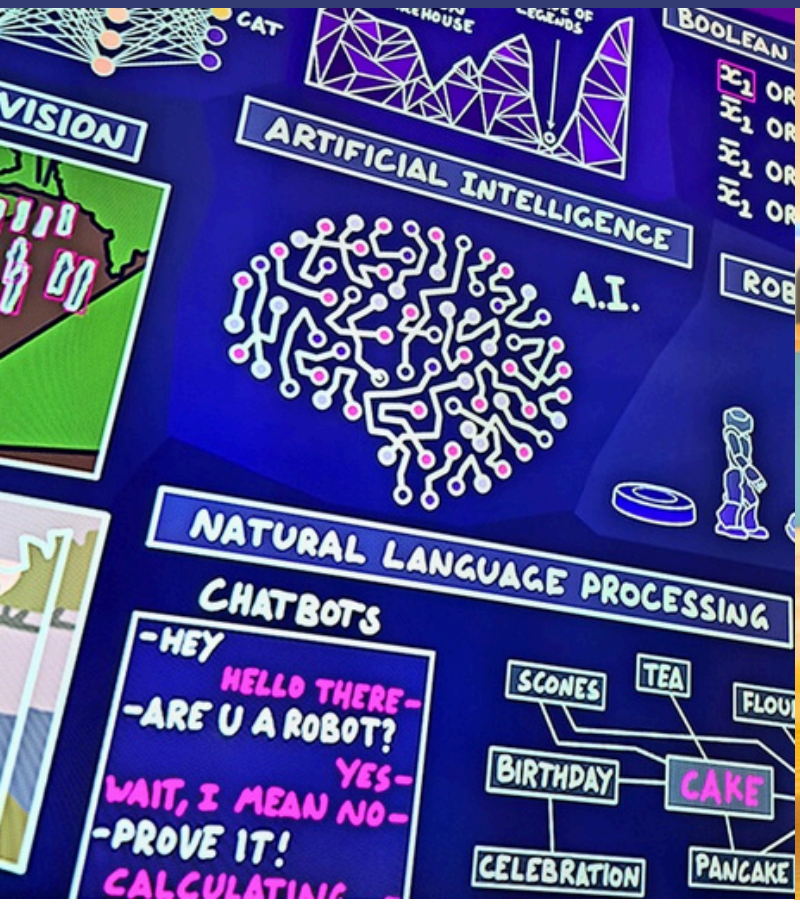
THE SCIENCE OF DESTRUCTION

Every solid object will eventually break! The strength of materials is a branch of mechanics that allows us to understand why and how. In this show, we will place various materials under stress, until they break. The propagation of their cracks will lead us to discuss essential notions in solid state physics and materials chemistry. As many of the materials that will be manipulated are edible, this show includes a small 'destructive snack' for the participants...

- Traction-compression-shear
- Hardness
- Elasticity
- Plasticity
- Fragility
- Young's modulus
- Poisson's ratio
- Photoelasticimetry
- Ultra-fast camera

COMPUTER SCIENCE

From 12 years old
Max. 20 people
Duration 1h



ALGORITHMS AND ARTIFICIAL INTELLIGENCE

We are always surrounded by algorithms. How do they work? What can algorithms do? How can a computer learn? How can a computer recognise objects in images? What will our future look like with artificial intelligence? Discover the fascinating world of computing in a fun way!

- Card sorting
- Finding the shortest path
- Reinforced learning
- Neural network
- Take on an AI

MORE TO CHECK OUT

Activities designed exclusively for Luxembourg secondary schools.

WORKSHOP – DiscoverU: A Gateway to Engineering (6e+) 27

WORKSHOP - DiscoverU : Life of a Scientist (5e+) 28

WORKSHOP – Medical Imaging (for secondary schools) 29

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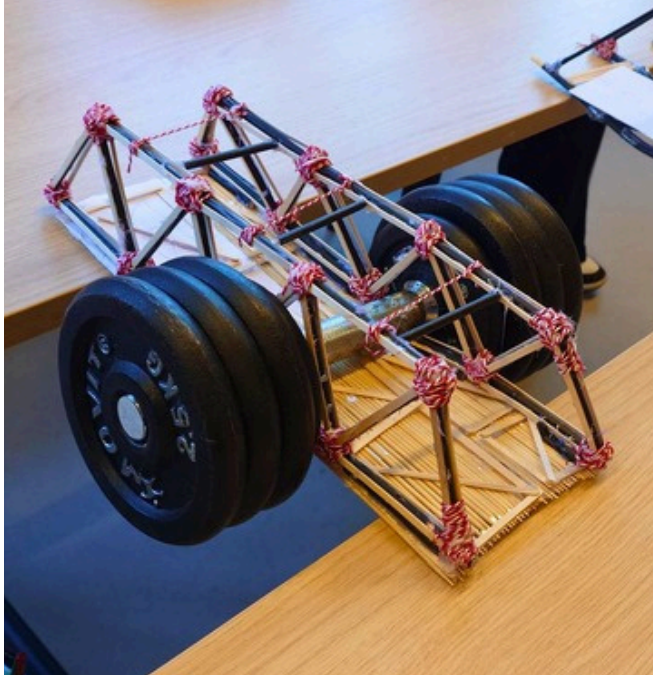
BIRTHDAYS, TEAMBUILDINGS & CORPORATE EVENTS 33

NEW!

DISCOVER U Workshop A Bridge to Engineering



WORKSHOP for secondary school classes (Luxembourg lycées)

TURN YOUR STUDENTS INTO ENGINEERS FOR A DAY:

In this workshop, participants will be encouraged to consider a career in engineering. Which team will build the sturdiest bridge despite limited resources and simple materials?

PRACTICAL INFORMATION

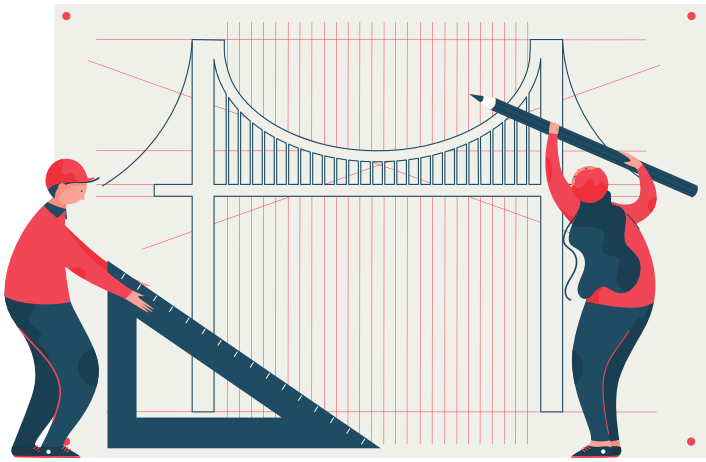
- For 6e+ (ages 14 and up)
- Outside of school holidays
- FREE with prior registration (Lycées LU)
- Duration: 3 hours

The Luxembourg Science Center in Differdange, in collaboration with the Luxembourg Chamber of Commerce, cordially invites you to register your school classes for FREE for the brand-new workshop “DiscoverU: A Bridge to Engineering.”

This nearly three-hour hands-on workshop places students at the center of a design challenge. With a limited budget and simple materials (wooden sticks, string, paper), each team must design, build, and test its bridge model.

Beyond scientific experimentation, this workshop serves as a career exploration tool. By contrasting the phases of theoretical design and practical implementation, it helps students discover which tasks interest them most: planning and solving abstract problems, or hands-on crafting and concrete implementation.

It is an excellent opportunity to learn about engineering careers, develop team spirit, and spark career aspirations.



BOOK HERE

www.science-center.lu

DiscoverU@Science-Center.lu

LUXEMBOURG SCIENCE CENTER

CHAMBER OF COMMERCE LUXEMBOURG

NEW!

DISCOVER U Workshop Life of a Scientist

WORKSHOP for secondary school classes (Luxembourg lycées)

TURN YOUR STUDENTS INTO RESEARCHERS FOR A DAY!

This workshop offers secondary school students the opportunity to gain a realistic insight into the daily life of a scientist or laboratory technician. Are these professions simply about carrying out experiments, or is there more to it?

The Luxembourg Science Center in Differdange, in partnership with the Luxembourg Chamber of Commerce, is pleased to invite you to register your classes for FREE for its brand-new workshop: "DiscoverU: Life of a Scientist."

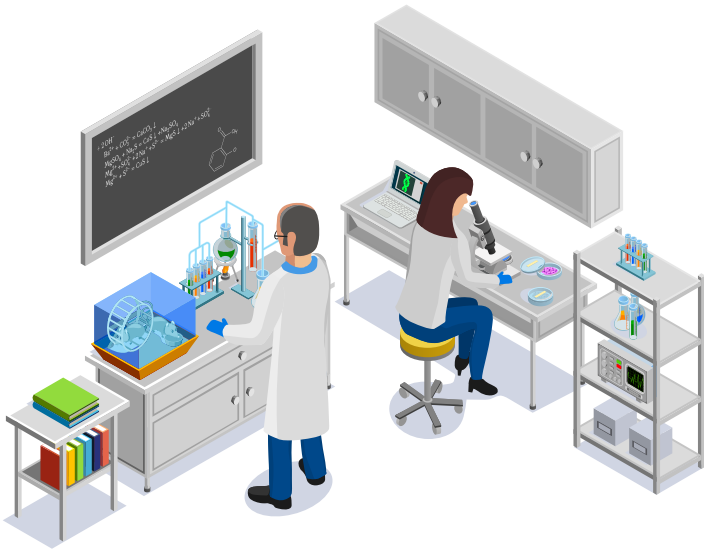
This 3-hour workshop allows students to step into the shoes of a scientist tasked with analyzing the quality of water bodies surrounding the Luxembourg Science Center.
In addition to collecting physical, chemical, and biological parameters, students will learn to critically evaluate the data gathered, identify correlations, and present their findings coherently—all essential aspects of a scientist's work.

The workshop aims to serve as a guidance tool for students' future career choices. It helps them discover whether they are more drawn to the technical process of data collection or if they identify more with the role of a scientist—focusing on data interpretation and connecting experimental results with theoretical concepts.

Ultimately, this workshop offers an excellent opportunity to spark students' curiosity about natural science careers through a relevant, hands-on, and engaging topic.

INFORMATIONS PRATIQUES

- For 5e+ (ages 15 and up)
- Outside of school holidays
- FREE with prior registration (Lycées LU)
- Duration: 3 hours



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LUXEMBOURG SCIENCE CENTER

CHAMBER OF COMMERCE LUXEMBOURG

NEW!

MISSION BIOMÉDICALE
Workshop
Medical Imaging

WORKSHOP for Secondary Schools

The “Mission Biomédicale” project, co-funded by the André Losch Fondation, aims to teach biomedical sciences in a fun and accessible way. It covers topics that are often overlooked in traditional curricula, with the goal of sparking curiosity about the natural sciences in young children and—why not—igniting their interest in potential career paths.

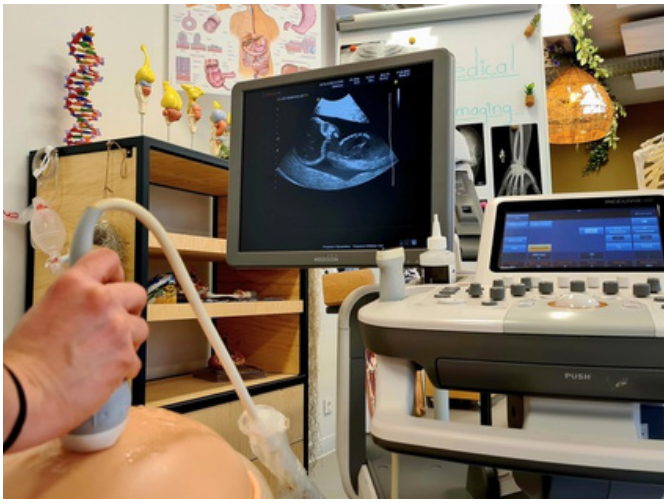
One of the pillars of this project is our brand-new workshop: “Medical Imaging.”

- **WORKSHOP: “Medical Imaging”**

Here, we will work with the students to explore various medical imaging techniques used by different healthcare professionals, with a focus on ultrasound examinations. We place great emphasis on hands-on practice.

PRACTICAL INFORMATION

- For secondary school students
- FREE with prior registration (Lycées LU)
- Duration: 1.5 hours



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LUXEMBOURG SCIENCE CENTER

andré losch FONDATION

NEW!

SCIENCE SHOWS

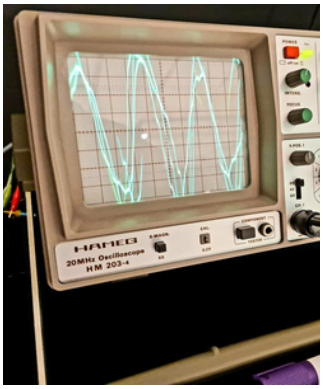
Aligned with the curriculum (6e C)

www.science-center.lu

ONLINE BOOKING FORM

Many of our shows can also be adapted to the curriculum for 6e C classes (Luxembourg). Following these shows, exclusive worksheets are distributed (summary of the experiments, multiple-choice questions, and a bonus question).

Below you will find the corresponding shows:

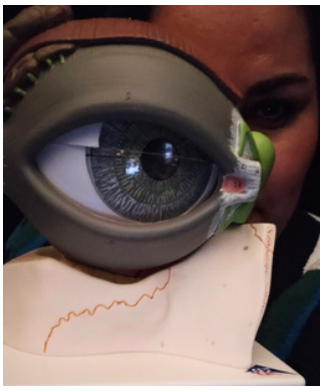


Show : ACOUSTICS / EAR (6eC)

How do our voice and hearing actually work? Discover the mechanisms of sound—from the speed of sound to frequencies and resonance, all the way to the harmonic vibrations in musical instruments. Using an oscilloscope, we can analyze different sounds to understand their composition and visualize their waveforms.

Show : SUGAR AND ENERGY (6eC)

What does energy have to do with sugar, and what exactly is sugar anyway? In this exciting experiment, discover how sugar, sweeteners, and flour differ when it comes to producing energy, and find out if “light” products are really sugar-free. At the end of this educational adventure, a sweet surprise is waiting for you!



Show : COLORS AND EYES (6eC)

How do our eyes work? Through exciting experiments, we will take a closer look at the different types of color mixing, as well as the absorption and reflection of light. Using cameras, we will simulate pupil dilation and exposure time to draw a connection between biology and technology. The question of whether yellow light is actually yellow will be addressed using monochromatic and dichromatic light sources. Finally, we will also examine the invisible part of the light spectrum.

NEW!

SCIENCE SHOWS

Aligned with the curriculum (3e/2e B oder C)

www.science-center.lu

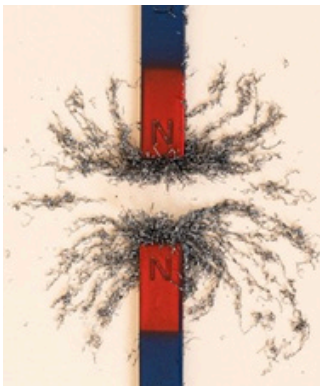
ONLINE BOOKING FORM

Many of our shows can also be adapted to the curriculum for 3e/2e B or C classes (Luxembourg). Following these shows, exclusive worksheets are distributed (summary of the experiments, multiple-choice questions, and a bonus question).

Below you will find the corresponding shows:

Show : WHAT IS ELECTROSTATICS? (3e/2e B or C)

Through striking experiments in classical electrostatics, the interactions between electric charges are clearly explained. Demonstrations such as the Van de Graaff generator, the Faraday cage, breakdown voltage, and the neon tube make the underlying phenomena visible. At the heart of these observations is the electric field, a central concept that connects all phenomena—culminating in the spectacular finale with the Tesla coil.



Show : MAGNETISM (3e/2e B or C)

Amazing experiments reveal the properties of magnetism and the close links between electricity and magnetism. Electromagnetic induction, the Laplace force, and eddy currents are showcased through surprising demonstrations, some of which use two large Helmholtz coils. Serving as the common thread of the show, the magnetic field connects these various phenomena right through to the end, where we conclude with the Earth's magnetic field and the fascinating aurora borealis.

TEACHER TRAINING

ESERO Luxembourg

EDUCATION THROUGH SPACE

ESERO (European Space Education Resource Office), an educational network promoting the spatial context in primary and secondary school classes, supports Luxembourg teachers by providing them with...

- **teacher training**
- **school projects**
- **educational resources**

ABOUT ESERO

By using space as a motivating learning context, ESERO helps students discover science and technology subjects. Space will no longer just be a source of inspiration and dreams for students, but a part of their everyday lives.

Hosted by the Luxembourg Science Center in Differdange, ESERO Luxembourg is co-financed by the European Space Agency, the Luxembourg Space Agency and the Ministry of Education, Children and Youth, in collaboration with the Institut de Formation de l'Éducation Nationale (IFEN).

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Monday to Friday: 9am - 5pm
Saturday, Sunday and public holidays:
10am - 6pm Annual closures: January 1 and
December 25 and 26