



**Surrounded
by Science**

Newsletter #8

March 2024

**UNIVERSITY
OF TWENTE.**



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WEIZMANN INSTITUTE OF SCIENCE

NTNU



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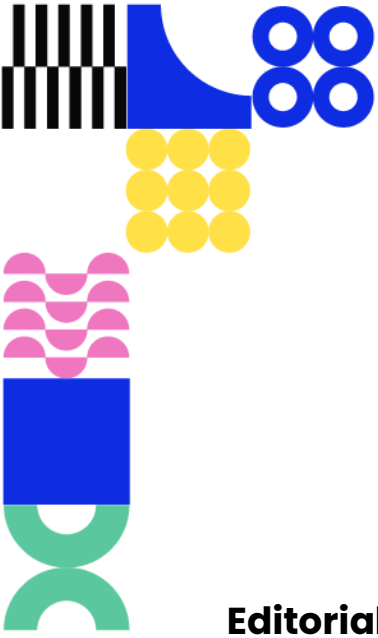
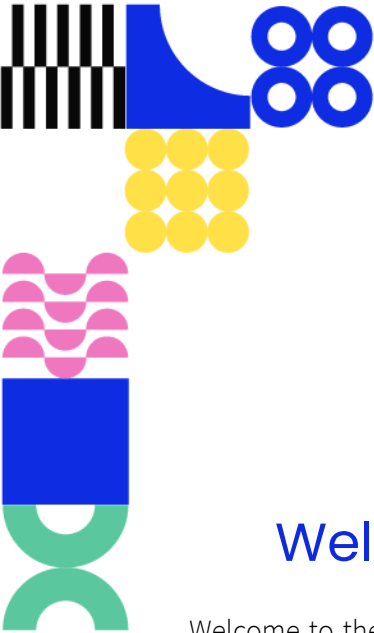


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Editorial

Welcome to the March 2024 newsletter

Welcome to the latest edition of the Surrounded by Science newsletter! Dive into a world where curiosity knows no bounds, and discovery fuels our passion for understanding the wonders of the scientific world. Keep up to date with the project news and join us as we explore the frontiers of science and celebrate the power of knowledge. Whether you're a seasoned scientist, an avid enthusiast, or simply curious about the mysteries of science, there's something for everyone in this month's edition. Let's embark on a journey of discovery together!

In this issue:

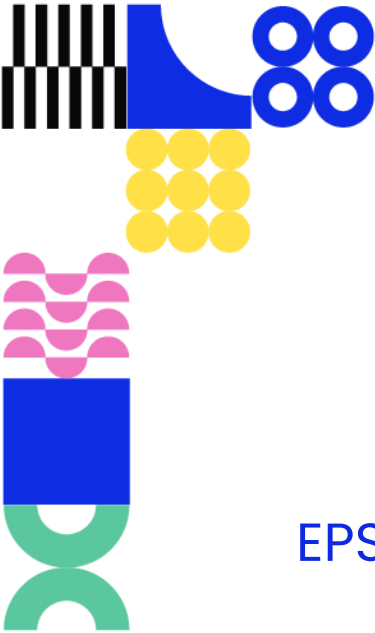
- Read about the EPS Citizen Science Competition 2024 that happened in February!
- Find out more about the SbS participation at OTTER's final conference "Beyond the classroom: rethinking STEAM education"
- Know more about the project presentation at the Zoo Pedagogy conference in Arnhem
- Find out more about what happens when Physics meets Society, with the SbS participation at the 20th National Conference of the Hellenic Physical Society
- Browse through our section "What we're reading, listening to and watching" to get inspired with insightful resources on out-of-school STEM

Be part of our journey and discover the latest developments in our project! Don't forget to visit our website, subscribe to the newsletter, and follow us on social media!



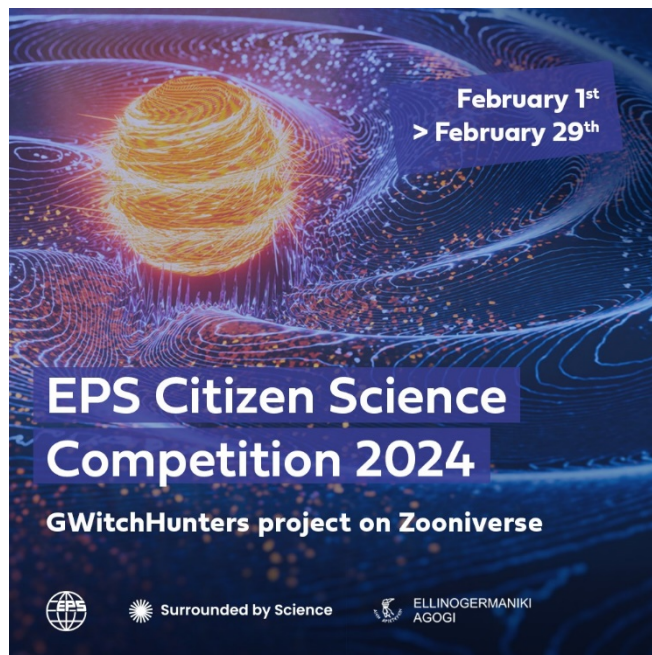
Joana M. da Silva & Federico Iannuli
Newsletter Co-editors





News

EPS Citizen Science Competition 2024



EPS Citizen Science Competition 2024: Get ready to join the European Physical Society (EPS) in a thrilling scientific journey! Starting from **1st – 29th February**, engage in the [GWitchHunters](#) project on [Zooniverse](#). This competition offers you the unique opportunity to impact Gravitational Wave Astronomy by improving the [Virgo Gravitational Wave detector](#) detector capabilities and win one of three exclusive travel grants. These grants are your golden ticket to explore the cutting-edge facilities of [EGO-Virgo](#), European Gravitational Observatory, located in Pisa, Italy. Get ready to contribute to science that shapes our understanding of the Universe!

How to join?

1. **Register on Zooniverse:** Sign in [Zooniverse](#) and complete this [form](#).
2. **Engage in Challenges:** Visit the GWitchHunters Project page and study its contents. You can find supporting materials here. You are invited to do as many classifications as possible in the following level: Level 3 – Watch out the sensors. Please note that only the total number of classifications within the competition's period will be taken into account. Classification quality will be taken into account, therefore, please classify carefully!





Winner Selection: The 20 highest-performing participants will be shortlisted for the travel grants to EGO-Virgo. Those shortlisted are required to provide a letter of motivation presenting your rationale for joining the competition and wanting to visit EGO-Virgo. Selection of winners will be based on a combination of classification achievements (70%) and the quality of the motivation letter (30%). Award recipients will have the chance to share their experiences via a video or written interview, which will be featured on the [Surrounded by Science](#) project's social media platforms.

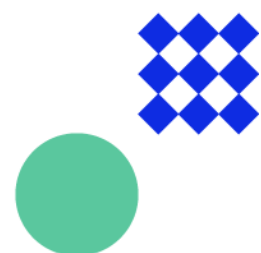
Key Dates: Classification count valid only until **29th February 23:59 CET**. The winners of the three travel grants to visit CERN and EGO-Virgo will be announced in early March on the Surrounded by Science website. Stay tuned.

Additional Opportunities: Engage in further science related activities via the [Science Chaser](#) app brought to you by Surrounded by Science.

Funding & Support: Grants funded by the [Surrounded by Science](#) EU project and the competition supported by [Ellinogermaniki Agogi](#) and the GwitchHunters project team.

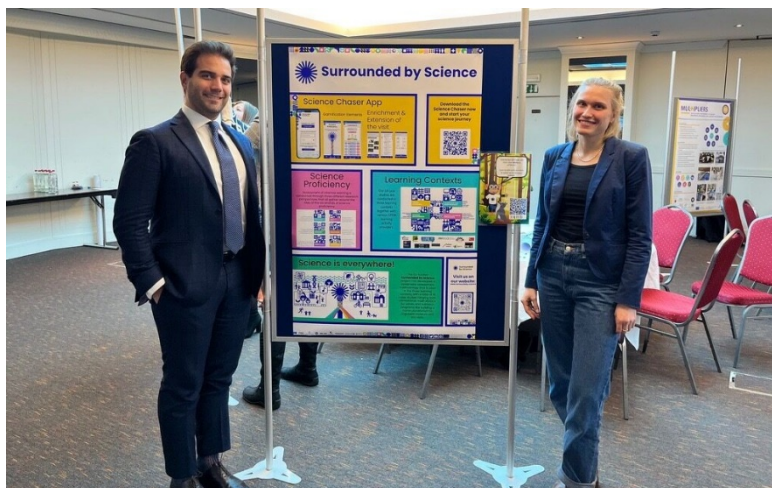
Eligibility: The participants have to be 18+ years old, based in an EU member state or in an associated state or a third country to Horizon Europe and to be registered in the Zooniverse platform fulfilling the above-mentioned conditions are eligible to participate in the challenge. The full list of eligible countries can be accessed at the following link:
https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/list-3rd-country-participation_horizon-euratom_en.pdf

Join this competition and leave your mark in the realm of Gravitational Wave Astronomy!





SbS at OTTER's final conference "Beyond the classroom: rethinking STEAM education"

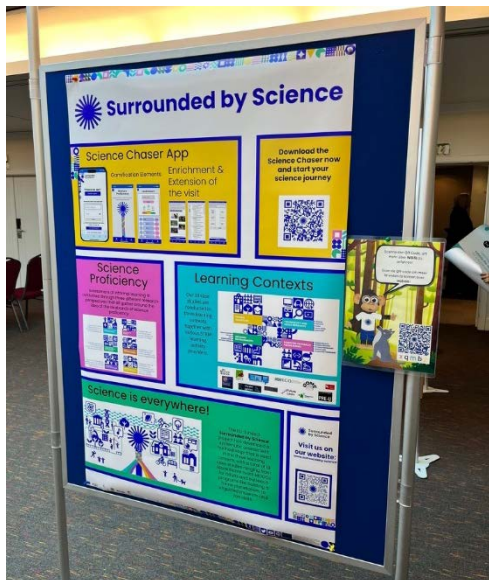
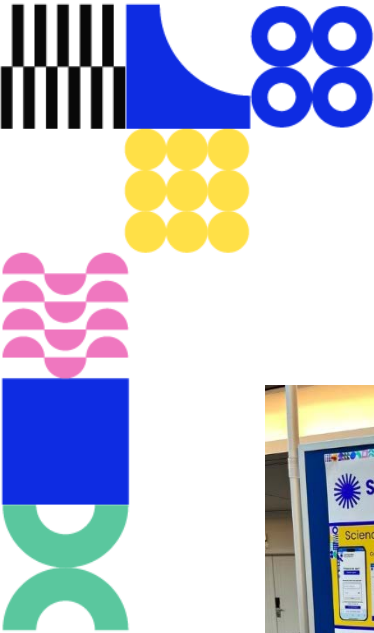


On the 15th of February, the SbS consortium members were invited to our sister project [OTTER](#)'s final conference. The event, titled "[Beyond the classroom: rethinking STEAM education](#)", was focused on the recognition of Education Outside the Classroom (EOC) methodologies to improve STEAM education.

The first part of the conference was comprised of four speeches that introduced the topic, discussed the OTTER project objectives and its results, and the role of out-of-school STEAM education in a sustainable future. The event also featured a panel discussion where four experts debated several questions regarding EOC challenges and opportunities, such as the relation between out-of-school activities and 21st-century skills, the main challenges to EOC integration in the national curricula, the possible role of technology in STEAM EOC and the future role of accreditation in the sector.

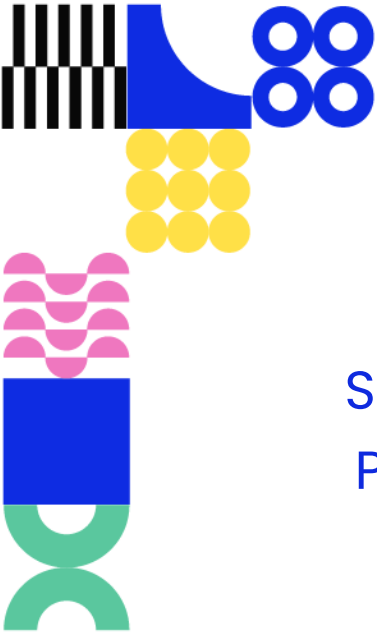
The day ended with a World Café, where participants were divided into five groups, two led by OTTER and three by other projects, and switched groups every 30 minutes so that everyone could participate in every table's discussion. Surrounded by Science led the group regarding the incorporation of technology in EOC activities. There, the project's main ideas, as well as its two apps, were presented. This discussion later evolved into what a visitor/user might need to better engage with apps like the [Science Chaser](#) and what a provider would expect from a platform like the Science Booster app.





The “Beyond the classroom: rethinking STEAM education” conference served as an invigorating inspiration towards transformative change in the education sector. Through the contributions of speakers, participants, and researchers alike, we have witnessed the potential to bridge the gap between knowledge and action. This event highlighted the collective power we possess to translate our research findings into actionable policies, thereby catalysing positive change within the education sector for a brighter future. Together, we have the ability to create an environment where every individual has the opportunity to thrive through an equitable and inclusive educational environment.





Surrounded by Science at the Zoo Pedagogy conference in Arnhem



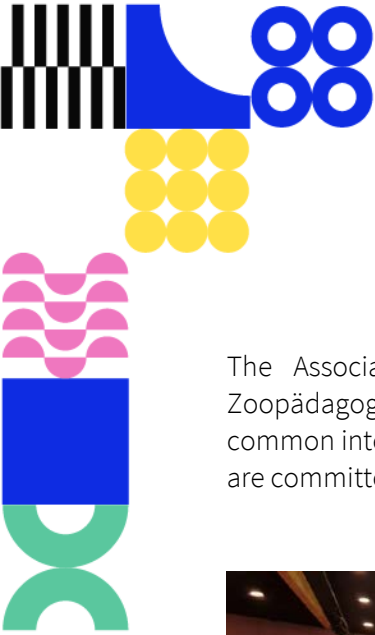
By Clarissa Lang

Thanks to one of our case studies, the 'Tierpark Nordhorn,' the [Surrounded by Science](#) project was invited to share and present the current results of our research project during the Zoo Pedagogy conference at the Burger Zoo in Arnhem, in the Netherlands. Almost 90 participants from Germany, the Netherlands, Austria, and Switzerland came together for four days for an intensive exchange. The programme included many important and innovative suggestions on the current topics of zoo education.



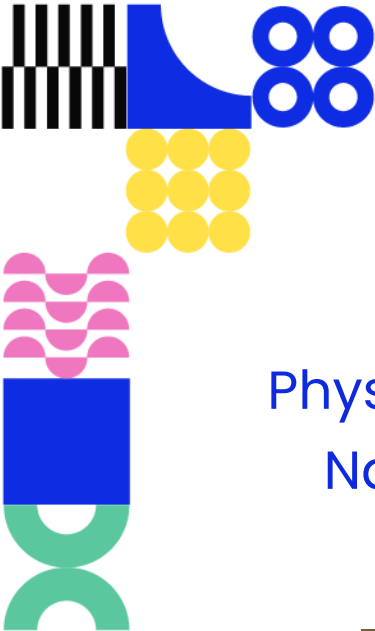
The focus was on education for sustainable development, with theoretical examples and, above all, practical suggestions for implementation. The session in which SbS participated mainly focused on possibilities for evaluating informal STEM learning in Zoos and similar designed environments. After the presentation of the current results, the possibility of exchanging and discussing was given.





The Association of German-speaking Zoopedagogues (Verband der deutschsprachigen Zoopädagogen, VZP) brings together colleagues from German-speaking zoos to represent their common interests. In order to safeguard educational work at the zoo as a place of learning, they are committed to anchoring zoo education in guidelines, curricula, and training regulations.





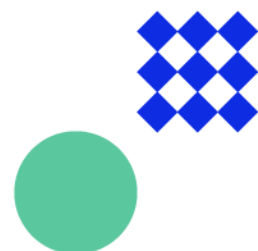
Physics meets Society – SbS at the 20th National Conference of the Hellenic Physical Society

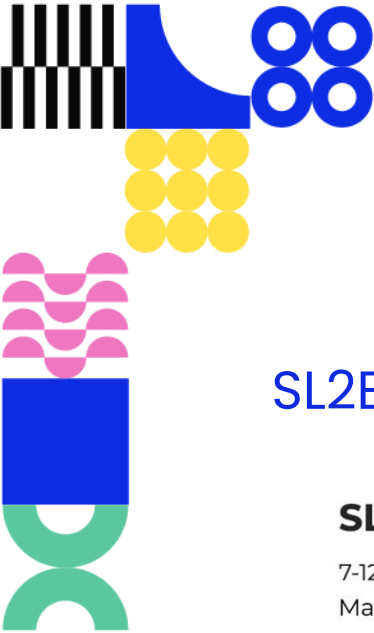


How can we introduce non-formal learning practices in formal science education, and what is the added value to students' science proficiency? On March 9, 2024, Dr. Sofoklis Sotiriou from Ellinogermaniki Agogi presented the framework, status, and preliminary findings of [Surrounded by Science](#) to the 20th National Conference of the Hellenic Physical Society.

More than 200 Greek physicists and educators attended the conference, exchanging ideas and experiences. Many innovative educational interventions and their impacts were presented during the three days of the conference entitled “Physics meets Society”.

Dr. Sofoklis Sotiriou presented the vision of Surrounded by Science and the results from the first year of implementation. The pathway implemented by Ellinogermaniki Agogi in the [framework of Surrounded by Science](#), as well as the activities planned for the Greek community until the end of the project, were presented.





SL2E International Summer School 2024

SL2E International Summer School 2024

7-12 July 2024
Marathon, Greece



ESIA
European School Innovation Academy

REGISTER NOW!

Schools as Living Labs in STEAM Learning Ecologies and Policy Contexts

The SL2E International Summer School 2024 introduces its participants to concepts, methods, practices, and policies centered on the intersection of open schooling, living labs, out-of-school science learning, and STEAM learning ecologies.

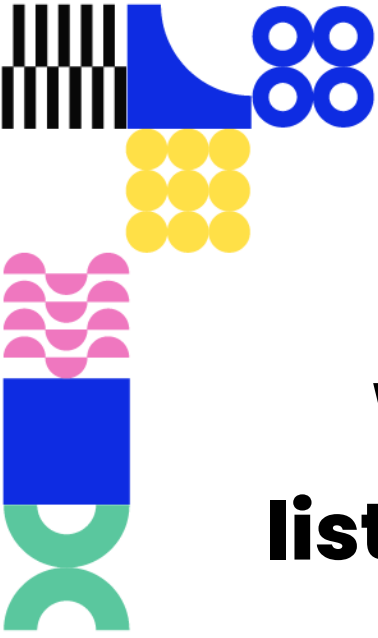
The Summer School prepares practitioners and decision makers to catalyse positive change in education. It inspires and empowers them to open up schools and other learning spaces to the society and current challenges, working together with the community to address common problems, fostering learners' initiative, creativity and expression, and creating inclusive paths for everyone within continuums of learning opportunities.

Thanks to an organic link to Europe's current efforts to improve science education, the SL2E International Summer School 2024 offers its participants an empowering framework and unique practice opportunities to explore and engage in state-of-the-art ways to turn schools and other learning spaces into catalysts of positive change within their local communities.

Throughout a week rich in lectures, seminars, workshops, peer interaction as well as social activities, Summer School participants design and develop their own open schooling-inspired, living lab-based, STEAM education-related projects and initiatives, with their own aspirations, needs and conditions in mind.

You can find out more about this Summer School [here](#).



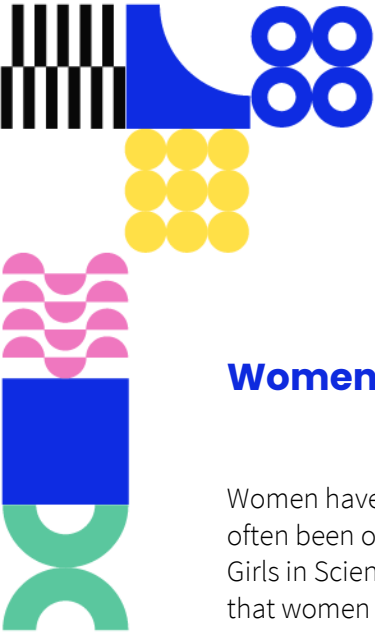


What we're reading, listening to and watching



A curated selection of reads, movies and videos, podcasts, and more on out-of-school STEM learning.





Women in Science

Women have long been integral to the advancement of science, yet their contributions have often been overlooked or undervalued. As we approach the International Day of Women and Girls in Science on February 11th, it is an opportune moment to reflect on the significant role that women play in shaping the landscape of scientific discovery.

Despite facing systemic barriers and biases, women continue to excel in various scientific disciplines, driving innovation and progress forward. This serves as a reminder of the importance of promoting gender equality in STEM fields and recognising the achievements of women and girls in scientific fields worldwide.

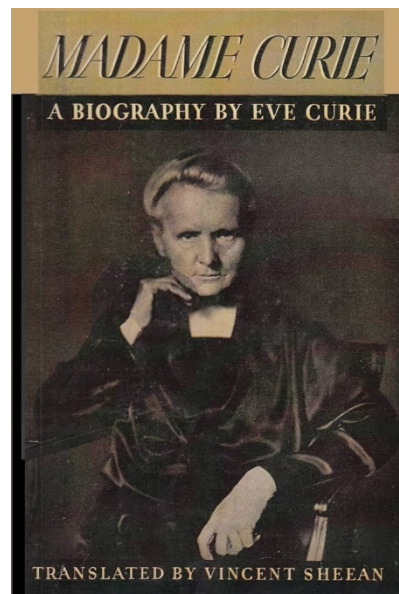
READS

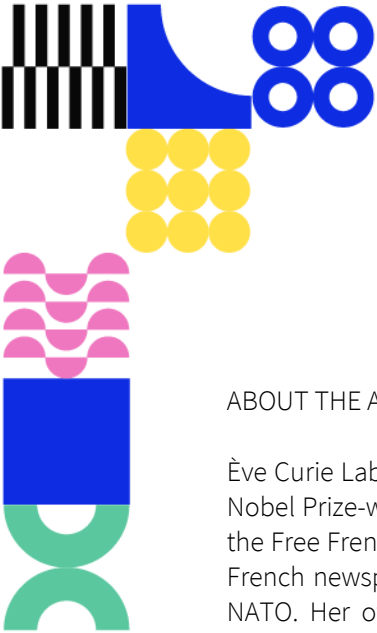
Madame Curie: A Biography by Eve Curie

DESCRIPTION

Marie Skłodowska Curie (1867-1934) is one of the most famous scientists of all time. She was the first woman to be awarded a Nobel prize and the first person (and still the only woman) to win two Nobel prizes (for physics in 1903 and for chemistry in 1911). However, she had been discriminated against as a scientist; for example, her membership application to the French Academy of Sciences was turned down even though she had already won her first Nobel prize. Several prejudiced campaigns were also conducted against Curie, such as false rumours spread by the right-wing press, which included claims that she was Jewish and not truly French, and thus unworthy of a place in the French Academy.

In this book, written by the scientist's daughter, Ève Curie, it is possible to discover Marie Curie's life from an insider perspective. From her childhood in Poland to her storybook Parisian marriage to fellow scientist Pierre Curie, to her tragic death from the very radium that brought her fame, this timeless biography celebrates an astonishing mind and an extraordinary woman's life.





ABOUT THE AUTHOR

Ève Curie Labouisse, a journalist and humanitarian, is best known for her biography of her mother, the Nobel Prize-winning scientist Marie Curie. Ève Curie was also known for her staunch public advocacy of the Free French cause after the Nazis occupied France in 1940. After the war, she was a publisher of the French newspaper Paris-Press, and in the early 1950s was a special adviser to the secretary general of NATO. Her other books include “Journey Among Warriors” (Doubleday, Doran, 1943), a best-selling account of her 40,000-mile trip across a series of wartime fronts: North Africa, Iraq, Iran, Russia, India, Burma, and China.

PODCAST

The Lost Women of Science

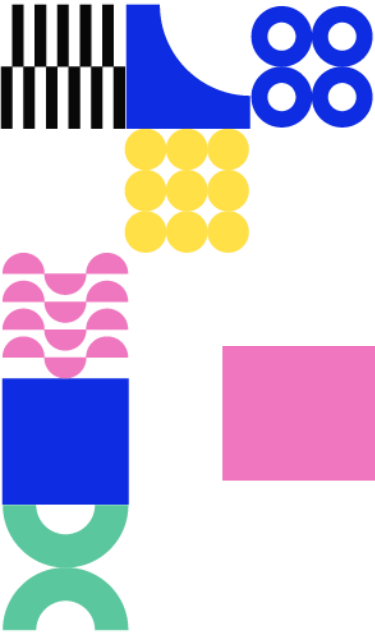


The Lost Women of Science podcast sheds light on the lives and contributions of numerous female scientists, many of whom, unlike Marie Curie and Rosalind Franklin, have not yet received widespread recognition. This podcast delves into the stories and achievements of these groundbreaking scientists who have been overlooked due to factors such as their gender, the time period they lived in, or their geographic location. Each season of the series is dedicated to exploring the life of a different scientist, providing not only insights into her scientific endeavours but also delving into the societal and historical contexts that shaped her experiences.

The podcast also examines how the work of these scientists continues to have relevance in the present day. Each episode of the series focuses on the narrative of one overlooked woman in the field of science, ensuring that their stories are brought to light and appreciated.

Listen [here](#).





Video

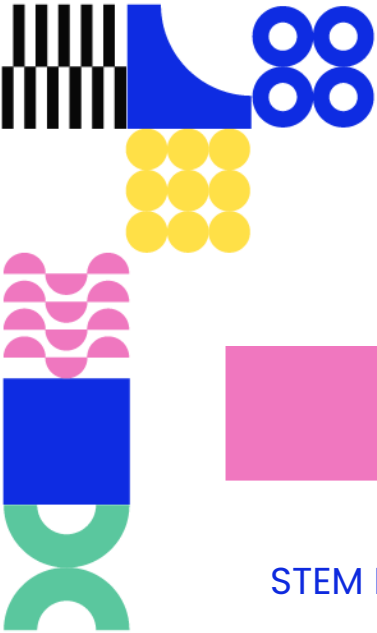
Movie: Hidden Figures



The three Academy Awards nominated movie *Hidden Figures*, based on the homonymous non-fiction book by Margot Lee Shetterly, is a call against inequalities in STEM, being them racial, gender-based, or any other nature. This drama, starring Octavia Spencer and Kevin Costner, tells the true story of three African-American female mathematicians (Katherine Goble Johnson, Dorothy Vaughan and Mary Jackson) who worked for NASA during the Space Race.

The movie focuses on the role of the three women, among the first black women to work for NASA, in John Glenn's Mercury-Atlas 6 mission, the first orbital spaceflight in United States history. Describing all the problems they had as women and African Americans in the 1960s, the story shows how the strength and determination of people like Mary, Katherine and Dorothy still help to this day to break down barriers and enhance equality in the STEM world.





Exhibition

STEM Passion – a Journey Inspired by Women in Science



A JOURNEY INSPIRED BY WOMEN IN SCIENCE

Exhibition / Ausstellung

13 FEBRUARY- 12 MARCH

Rahel Hirsch Center for Translational Medicine, Luisenstraße 65, 10117 Berlin



A journey through photographic images, words and sounds in the fascinating world of STEM, which highlights and celebrates the contribution of excellence, passion and leadership of great women scientists.
www.stempassion.com

Project:

Elisabetta Citterio
Claudia Cagliano

Photography:

Elisabetta Citterio

Sound Design:

Andrea Pozzoli

Graphic Design:

Claudia Brambilla

Exhibit Design:

Elisa Citterio

Hosted by:

MAX
DELBRÜCK
CENTER

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With contribution of:

CRCL470
DKFZ
BFSU

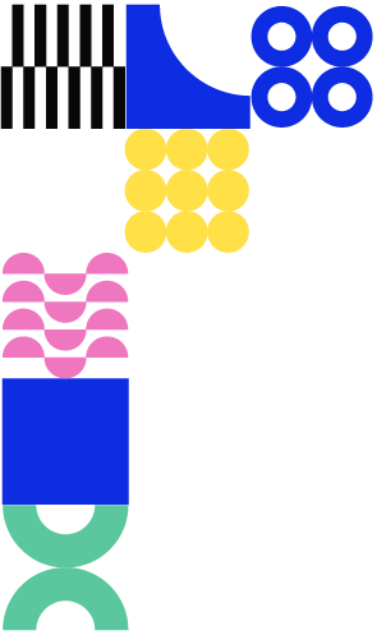
Sponsor:

BFSU

Despite facing greater barriers in the field of science, women continue to play a crucial role in driving scientific progress across all scientific fields. The exhibition “STEM Passion – a Journey Inspired by Women in Science” by Elisabetta Citterio and Claudia Cagliano celebrates the achievements of women in science, showcasing individuals from diverse backgrounds who have made significant contributions to their respective fields. This exhibition will be hosted at the Rahel Hirsch Center for Translational Medicine at BIH from February 13th to March 12th, 2024.

The opening event on February 13th, organized by the Max Delbrück Center and the Berlin Institute of Health, will aim to celebrate the accomplishments of women in science while increasing their visibility within the scientific community. It seeks to foster networking opportunities among early- and mid-career women, as well as non-binary, trans, and inter scientists from all STEM disciplines. There will be resources available to help participants enhance their public presentation skills on social media and on various other platforms for women scientists. By joining the event, attendees will have the chance to become part of the vibrant community of women in science in Berlin, contributing to a more inclusive and supportive environment for all individuals in STEM.





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