Organizing committee:

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> www.uv.es/experimenta www.uv.es/fisica

Organized by:

VNIVERSITAT (Q) Facultat de Física

In collaboration with:





The School of Physics of the University of Valencia (UVEG) announces the XIX e PERimenta Fair -Contest of Experiments and Demonstrations of Physics and Technology 2024, with the aim of bringing science and technology to the public, especially involving the younger audience.

Secondary school students who participate must carry out **STEM experimental projects** that, once completed, are exhibited and explained in this fair open to the public, highlighting the relationships between natural phenomena and technological applications that surround us, that is, between physics and technology.

We convened the **PERIMENTA** Fair - Contest for the first time in 2005 with the aim of involving students in the World Year of Physics in an active and creative way. The enthusiasm of contestants and visitors was extraordinary and contributed to transform it into an annual event.

WHO CAN PARTICIPATE?

Any secondary school student (ESO-FP*, Bachillerato **), individually or in **groups of a maximum of 4 members.** Each group must be **supervised by teachers** from their school to develop the project. Several groups from the same school may participate, as long as their projects are completely different and no more than three from the same level are presented.

- * ESO= junior high school (from 12 to 15 years old) or equivalent in age.
- * Bach= senior high school (from 16 to 18 years old- 2 years prior university) or equivalent

WHAT KIND OF WORK CAN BE PRESENTED?

Any **experimental STEM project** that demonstrates, at a qualitative and/or quantitative level, a physical principle and its technological application, and especially its interrelation. **ATTENTION**: this is not a written, audiovisual or simulation work. An experimental set-up with any type of material must be carried out and students should understand how it works and the underlying physical principles, make observations and/or measurements, etc. It is not essential that the idea is unpublished, although its originality and quality will be an asset. **Two competition categories** are established, which are subdivided into two secondary education cycles:

- **1.** Physics demonstrations and experiments (ESO-FP* and Bachillerato-CFGM**).
- 2. Technological applications projects (ESO-FP and Bachillerato-CFGM).

WHEN? HOW?

PHASE 1

On-line registration must be done until **29 JANUARY 2024** inclusive at <u>uv.es/experimenta</u>, including the participats data and **a description of the project** in a form that is available. This description should allow to understand the goals, as well as the basic aspects that support the project as well as the observations and expected results and conclusions.

PHASE 2

Admission will be communicated to the participating groups by e-mail and will also be published on our site <u>uv.es/experimenta</u>. Admitted projects can send a **5 minutes (maximum) video** presenting and explaining their work, as a preliminary material for the jury, with a deadline **18** April **2024**.

PHASE 3

The admitted groups will exhibit and explain their projects at the Fair-Contest on **Sunday morning, April 21, 2024 at the Science Museum of Valencia**, both to the visiting public and to the jury groups made up of university and high schools professors and teachers. **The proper functioning and the clarity and understanding of their work (students' explanations)** will be highly valued. The awards ceremony will be held at the Science Museum auditorium just after the closing of the Fair.

WHAT ABOUT THE PRIZES?

A total of five prizes will be awarded: one per contest category (four in total, decided by the jury), of 150 € per person and another of 100 € per person to most voted project by the visiting public (person = participating pupil or student registered in a project). Various honorable mentions will also be awarded. The jury reserves the right to award two prizes in a category to the same schooling cycle, or to leave one of them vacant.

WHAT ABOUT THE TEACHERS AND THE SCHOOLS?

Prizes will be awarded to teachers with winner projects: **experimental teaching materials,** as well as participation and prize diplomas. Their work associated with the supervision of the students and their projects exhibited at the fair-contest will be certified by the education authorities of the Comunitat Valenciana. Details will be announced in due course at **uv.es/experimenta**.

EXHIBITION OF AWARDED PROJECTS AND ON-LINE MATERIALS

An exhibition of awarded projects, open to the public, will take place at a later date and professional videos of the students explaining their projects will be recorded. These videos and the attached project descriptions will be **published on-line** as teaching and dissemination materials.

YOU CAN ALSO BE...

Professor of Physics and climatologist at the University of Heidelberg. Her work on greenhouse gases and radiocarbon in atmospheric CO2 has been essential to corroborate that global climate change is due to the use of fossil fuels in human activity (anthropogenic origin).

Ingeborg Levin

