

## Organizing comitee:

Chantal Ferrer Roca, Miguel V. Andrés Bou, Amparo Pons Martí, Jordi Vidal Perona

Organized by:







With the sponsorship and collaboration of:









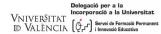


































Fair-Contest of experiments and demonstrations of Physics and Technology

Inscription deadline: 27 January

Sunday, April 13, 2025 From 10h to 13h | Museu de les Ciències de València

Realize your idea, make it work and explain it at a fair open to the public.

secondary education (7-12 grades)

www.uv.es/experimenta · @FiraExperimenta





































The School of Physics of the University of Valencia (UVEG) announces the 20<sup>th</sup> e PERimenta Fair - Contest of Experiments and Demonstrations of Physics and Technology 2025, 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 ePERimenta 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 - Ciclos Formativos de Grado Medio\*\*), 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
- \* Bach= senior high school (from 16 to 18 years old) 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 27 JANUARY 2025 inclusive at <u>uv.es/experimenta</u>, including the participants data and a description of the project in pdf, using a form (<u>doc/ods</u>) 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 the expected results and conclusions tan can be achieved.

#### 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 7 April 2025.

#### PHASE 3

The admitted groups will exhibit and explain their projects at the Fair-Contest on Sunday, April 13 2025 at the Science Museum of Valencia, both to the visiting public and to the jury groups of university professors and high schools 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 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.

In addition, as part of the celebrations for the 250<sup>th</sup> anniversary of Andrè Marie Ampère, the Ampère Museum / Friends of Ampère Society of Lyon (France) will independently award an <u>Ampère-Blas Cabrera-Experimenta</u> prize in each category of the fair, for projects in the field of electromagnetism or its applications, related to the motto "tomorrow, an electric world".

### WHAT ABOUT TEACHERS AND 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 <a href="https://www.experimenta">www.experimenta</a>.

### **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...

## Anne L'Huillier (1958)

French-born professor of atomic physics at Lund University (Sweden). Her experimental work on attosecond light pulses, which make it possible to follow the motion of electrons in real time and to understand chemical reactions at the atomic level, was recognized in 2023 with the Nobel Prize in Physics.

