

Action Number: CA21106
Room Title: Dissemination and Outreach
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<p><b>What is our main goal?</b></p> <p>To promote science dissemination at different levels, including a broad general audience, primary school students, high school students, undergraduate and master students, via interactive learning and via different media (talks, interviews, presentations). To convey that basic science is a fundamental ingredient in our lives: as human beings, we are interested in knowing our world, our origin and our fate or destiny!</p> <p>To promote gender balance in science, especially in physics.</p> <p>To disseminate our research work to the scientific community in workshops and conferences, adopting a multifaceted approach, involving e.g. multimessenger perspectives (theoretical, experimental) and experimental techniques.</p> <p>To disseminate research work in scientific publications in open access journals.</p>
<p><b>How can we achieve it?</b></p> <p><b>Outreach:</b></p> <p>Open days for undergraduate students to not be bias towards collider physics, and be more open to small-size experiments.</p> <p>Masterclasses for high school students with simulated data from an axion searching experiment. (Plus training young researchers in the different institutions for mentoring masterclasses)</p> <p>Primary schools (concepts of “Dark, Invisible”) in a didactical pedagogical way with interactive activities, promoting interactive learning</p> <p>Public talks in science museums, in high schools and also during training schools and COST meetings.</p> <p>Links to astronomy associations, collaborating with observations.</p> <p>Presentations about experiments in which the COST members are deeply involved, that are not very well known</p> <p>Public talks promoting gender balance (e.g. on the International Day of Women and Girls in Science on February 11<sup>th</sup>e.g. )</p> <p>Radio interviews, and also other non-scientific media publications</p>

Outreach material (video games, short videos or tic-toc about our scientific work to a non-specialized audience)  
Participation also in open science days (Pint of Science, European Researchers night and Dark Matter Day for example)

Guided tours and visits for schools/public in the different universities, research institutes and laboratories

### **Dissemination:**

Online talks/colloquia

Publication in open access journals

Presentations in conferences, workshops and COST meetings, with a special emphasis on young researchers.

Poster presentations in also in COST meetings, with a Nobel poster prize (physics book, t shirt)

Announcements in different media (CERN courier etc) of COST activities (training schools, workshops and meetings)

Multi-messenger approach to dark matter searches (colliders, axion-like particle searches, dark matter direct detection experiments, dark matter simulations) which could be the topic of some of future COST meetings.

Presentations about experiments in which the COST members are deeply involved, that are not well-known (as the GNOME experiment). We could easily do this by adding entries/announcements in the COST website.

### **Which resources do we need?**

Webpage with a special section to Outreach

Outreach material (small "toy" experiments simulating e.g. resonant cavities or others)

Budget for Masterclasses (software and platform) for high school students with simulated data from an axion searching experiment.

Budget for videos

Budget for some special activities in open days

Budget for Open Access (profiting also from some EU platforms already operating)

(notice that not all of them need financial support)

### **What are the next steps?**

Planning of the Dissemination & Outreach strategy, possibly including (among others):

Design of the webpage structure, defining the aim of each of its sections.

Development of outreach material.

Establishing connections to Master programs, undergraduate programs, high schools, and primary schools, to media (radio, TV), to astronomy associations, science museums and other local science organizations.

Production of videos, tic-tocs.