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Type: **Parallel Talk**

New educational activity about CMS air pads for education labs at CERN Science Gateway

Saturday, 9 July 2022 10:30 (15 minutes)

CERN is currently preparing Science Gateway, a new facility for scientific education and outreach that will open in summer 2023. Besides inspirational exhibition spaces, science shows and online education activities, Science Gateway will feature educational labs for hands-on scientific experiments for audiences aged 5 - 105. The design principles of Science Gateway's education activities aim to empower people of all backgrounds to engage with the discoveries, the science and the technologies at CERN.

Activities are designed to bring learners in contact with topics that are linked to CERN using authentic research equipment under guidance from volunteers from CERN's scientific community. The Hands, Head & Heart approach enables participants to actively take part in hands-on manipulations (Hands), cognitively through surprising observations and educational explanations (Head), and affectively through their positive experiences with volunteers (Heart).

The educational goals of Science Gateway are (1) creating memorable impressions related to STEM (science, technology, engineering and math), (2) fostering positive attitudes towards STEM professionals and STEM careers, (3) raising the awareness and understanding of nature of science and scientific methods, and (4) promoting the value of fundamental science.

This talk will provide an overview of the educational offer foreseen at Science Gateway including the hands-on labs, science shows and online education content. In the context of the new educational labs, a "Power of Air" hands-on activity involving 3D-printed hovercraft and toy balloons will be presented. This activity is designed to raise awareness of how engineers at CERN exploit the power of air to move 1000+ tonne detector slices by means of an air pad system.

In-person participation

Yes

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