



Update: Science Gateway Education

Anastasia Tezari

on behalf of the SG education team

Science shows: overview

5 different shows, 45 min, 200-400p

- Journey Through a Detector
- Proton Express
- Mysteries of Matter
- Seize the Data
- Science of Magical Parties

2 to 3 shows per day

English, French and bilingual



Science shows: objectives for 2024

Schedule more shows (approx. 200)

Find more guides

New developments (15-minute show for events, Outdoor show, Pop-up show)

Science show evaluation protocol

Recruit new Science Show coordinator/facilitator
(successor for
Anja KRANJC HORVAT)



Science shows: achievements 2024

Schedule more shows (approx. 200) ✓
350 shows between Jan-Sep 2024, 35k visitors

Find more guides
in progress, 140 guides trained, difficult summer

New developments (15-minute show for events,
Outdoor show, Pop-up show) ✓
summer student project
<https://cds.cern.ch/record/2907767>

Science show evaluation protocol in progress

Recruit new Science Show coordinator/facilitator
✓
[Laura de Vevey](#)



Lab workshops: overview

- 2 labs for 24p each
- 10 different workshops, 45 – 90 min
- age group 5-19 years + families and individual visitors
- English, French and many other languages
- 4-10 workshops per day
- >250 guides trained



Lab workshops: objectives for 2024

Offer more workshops (> 20k participants)

Offer different workshops for individual visitors & families (Open Workshops)

Develop new workshops (Ultrasound, Vacuum, Photons)

More evaluation

Recruit new Science Educator
(successor for Patrick THILL)



Lab workshops: achievements 2024

Offer more workshops (> 20k participants)



22k visitors since Oct 2024, about 1000 groups

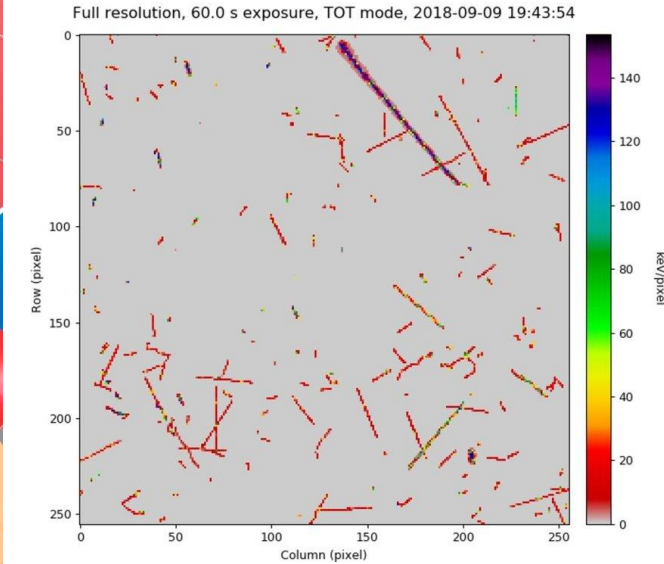
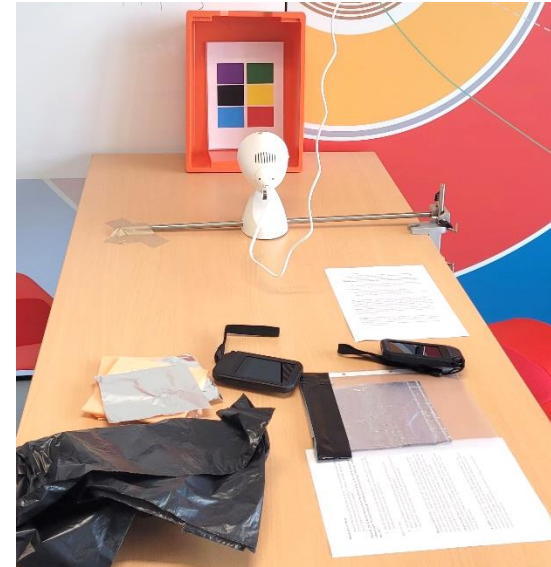
Offer different workshops for individual visitors & families (Open Workshops) ✓

Power of air & From CERN to our lives

Develop new workshops (Ultrasound, Vacuum, Photons) *in progress*

More evaluation *in planning*

Recruit new Science Educator
[Adelina Lintuluoto](#)



Ultrasound workshop

Discover the “sound spectrum” and how sound waves propagate in different materials.

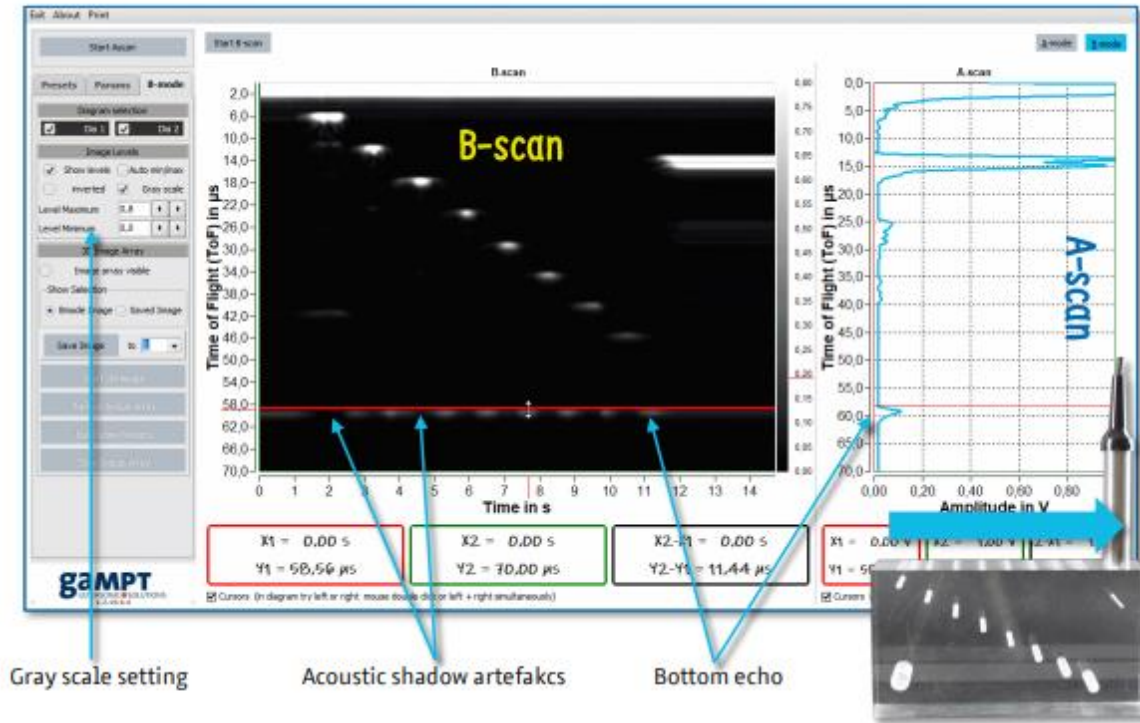
Understand image creation using ultrasounds.

Explore medical applications (imaging of 3-D phantoms)

Explore wire bonding (technique using ultrasound to connect microelectronics at CERN).

Target group: 13 – 15 years old

<https://www.gampt.de/en/product/echoset/>
<https://www.gampt.de/en/product/med07-ultrasonic-test-phantom/>



Gray scale setting

Acoustic shadow artefaks

Bottom echo



“Cosmic SOS” workshop

The universe and space, as well as radioactivity and nuclear physics, are contexts and content areas in which students report the highest interest.

Interactive adventure game with a focus on astroparticles and radiation.

Participants use different types of particle detectors to solve various puzzles and explore their broader applications beyond the terrestrial laboratories.

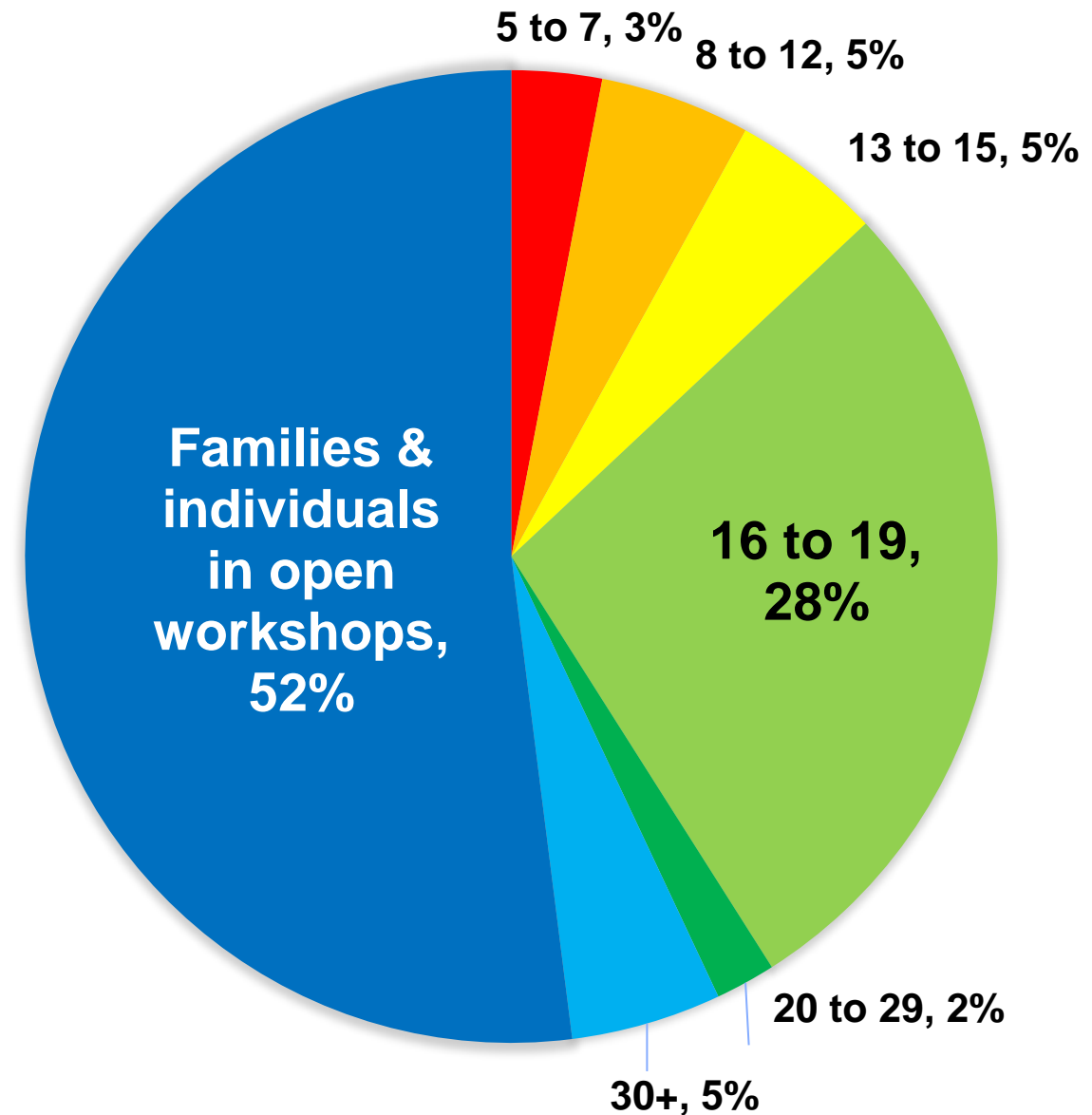
Predict – Observe – Explain

Target group: 13 – 15 years old



Lab workshops: achievements 2024

- Participant numbers exceed our expectations (22k in 11 months)
- Surprisingly high interest by families and individual visitors (52% of our audience)
- Very busy during school holidays and summer
- Overall good subscription levels for guides



Thanks for your attention!

Let's discuss