

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Calling Planet Earth - Space Outreach to the General Public (6)

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IMMERSIVE PROJECTS USED FOR SCIENCE COMMUNICATION - THE CASE OF ESCAPE  
ROOMS

**Abstract**

With the European Space Agency's next challenge to build a lunar base and the rise of private companies, space exploration will become accessible for tourism and industry, with the benefits of new useful technologies for our daily life on Earth. The lack of awareness and knowledge of the general public related to space exploration highlights the need to communicate and share the enthusiasm around this topic, as well as human exploration as a whole.

The conception of an escape room taking place in a lunar base, entitled "Switzerland, we've had a problem", bridges the gap between scientists and general public. Well-designed escape rooms are challenging in the right amount, offer a mix between luck and logic, allow for group interactions, and are thus a great form of scientific entertainment. Strengthened by this ever-growing popularity among the public, many artistic and cultural institutions are now taking inspiration from escape games for the design of their exhibitions and hands-on activities in order to engage—often young—audiences attracted by storytelling and gamified content. Escape rooms are also used for team and community building as they trigger cooperation and collaboration within the participants. Mixing this fun and challenging experience with science is a brand-new way to communicate science.

The non-profit organization Space@yourService saw the huge potential in SciComm of this entertainment mean and has launched, in collaboration with Swissnex, the Swiss global network connecting the dots in education, research, and innovation for the Swiss Confederation, a mobile escape room to inspire enthusiasm for space exploration among an audience not necessarily versed in the topic. It invites adults and accompanying children to become explorers themselves and experience a potential habitat on the Moon modelled by two inflatable tents, the lunar base and the mission control center respectively. The scenario and settings are based on real life materials: original communication and emergency handbooks, experiments of IGLUNA 2019 (ESA Lab demonstrator), and the failure triggering the emergency response based on ISS records. As for now, the escape game has been used for two events, engaging participants from all backgrounds in English and in French.

This immersive project has been able to raise awareness of space challenges, which are very close to challenges on Earth, and to reach different audiences more attracted to escape rooms than the scientific field itself. And therefore, to engage more enthusiasm towards the space field.