I4C (ITALY)
GRAND CHALLENGE (UK)

+ CIJ & research

passion
working
space

I4C (ITALY)

SAFM & POLITO
50 students 8 teams
partner organizations

experiments:
reporting in CIJ (+TUDelft)
teaching content (sci fi, movement, innovator in residence)

Innovation for Change

Young Talents | Global Challenges | Emerging Tech

I4C | Alumni Projects

While some of the projects develop into startups post I4C and raise funding, most of the projects are later continued internally by the sponsor companies & institutions

- Aquasmart (2016) is working with Acquedotto Asp Asti and has a partnership with Maddalena
- SoundBubble (2017) is developing the industrial product version in support with ENEL
- Aria (2018) is working with the Turin City Lab to deploy their sensors for a pilot project
- PowerTank (2018) has been selected to present at the Global Grad Show in Dubai in Nov 2018

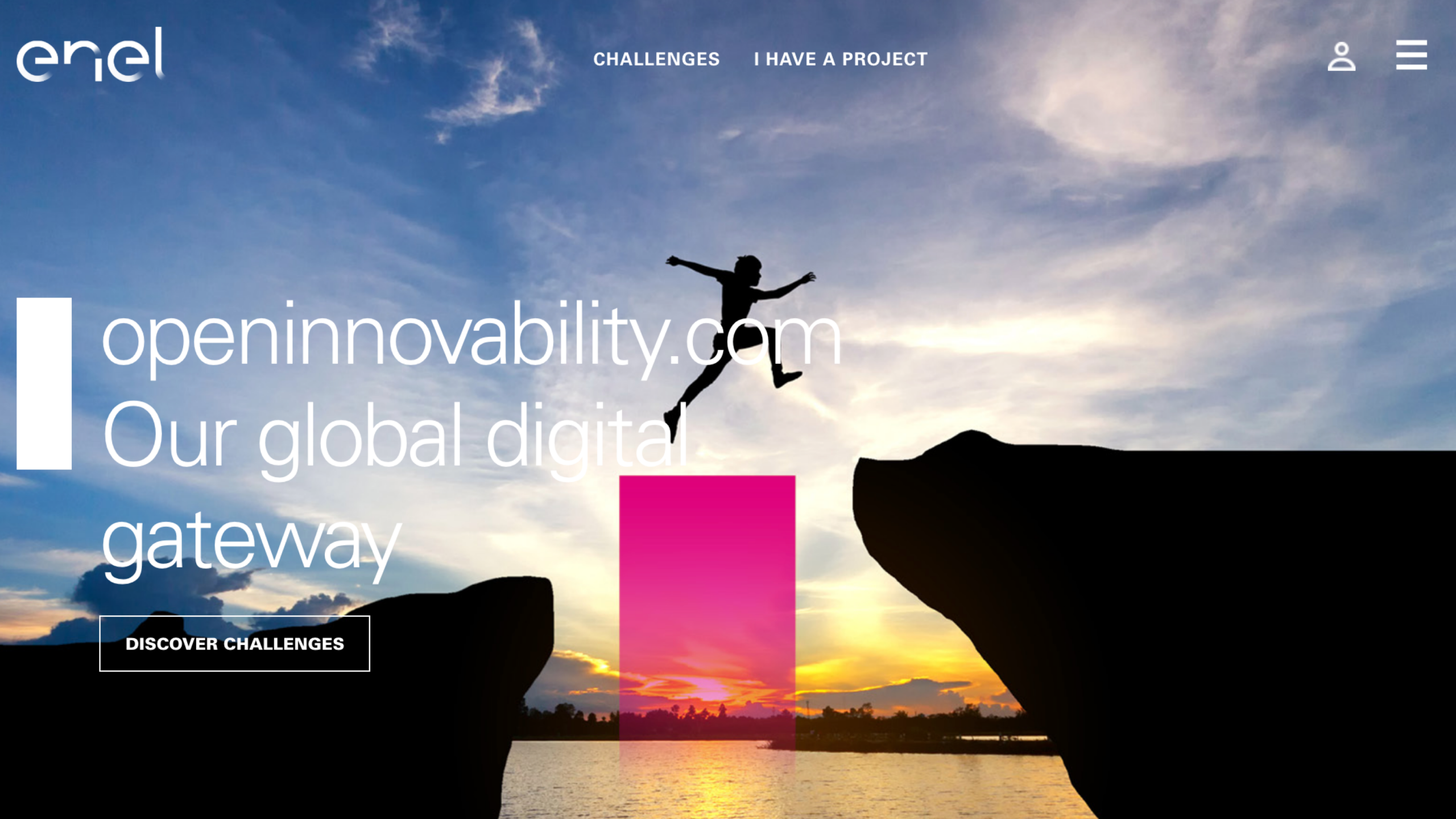
sei
school of entrepreneurship
& innovation

OUR MODULES

Education for, about and through Entrepreneurship & Innovation

ACADEMIC

Fondazione


CHALLENGES
I HAVE A PROJECT
openinnovability.com
Our global digital gateway
DISCOVER CHALLENGES

RCA / CERN Collaboration Applies Science and Design to Sustainability Challenges

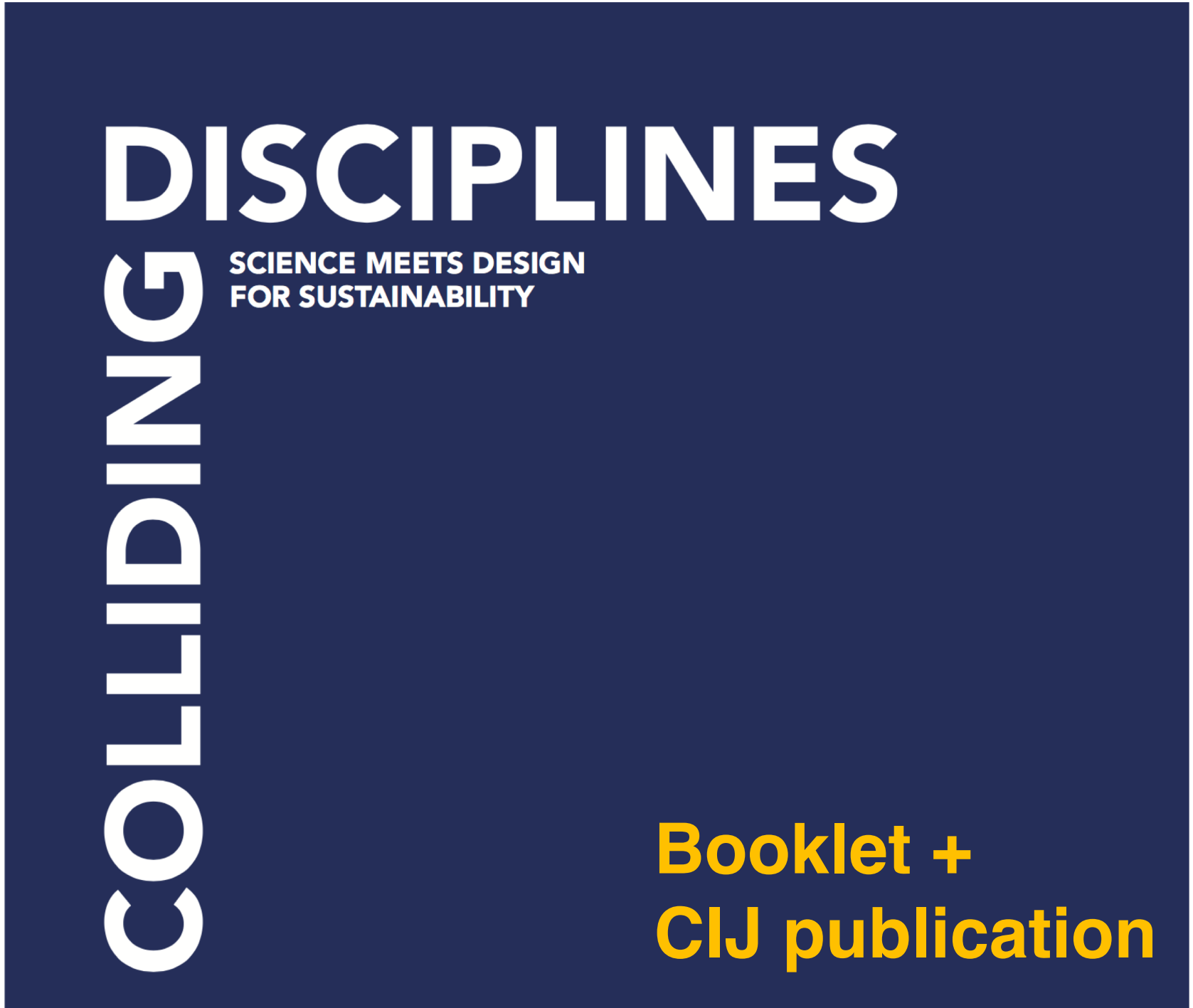
RCA/CERN collaborative project: ORBIS

pilot:

18 service design students

6 teams

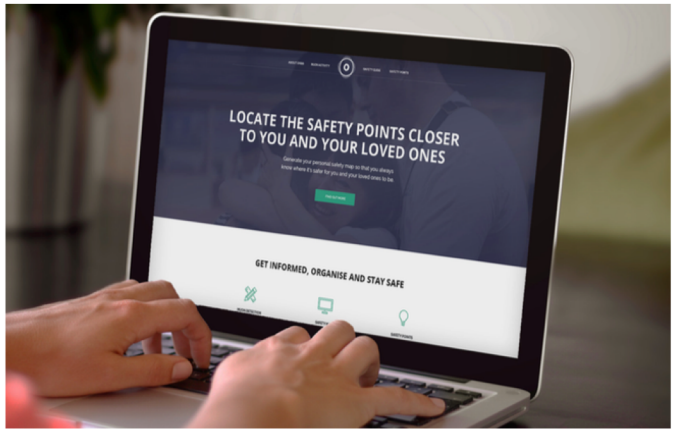
17 SDG’s



https://e-publishing.cern.ch/index.php/CIJ/article/view/765/640

Orbis

Avra Alevropoulou, Filippo Sanzeni, Vasiliki Karaoglou



Each year thousands of people die as a result of earthquakes, with billions of dollars spent on earthquake recovery. The scars that these natural disasters leave on both cities and their inhabitants are visceral reminders of the havoc earthquakes wreak. But they also served as our motivation - a reminder of what a difference early prediction and increased preparedness could make.

Orbis is an earthquake prediction and coordination service that makes use of CERN's open source, low cost muon detection technology. Muons are cosmic particles that pass through matter - they can reach up to 10 kilometres depth - without interacting with it. They do, however, interact with magnetic fields. The stronger the field, the more the muon's trajectory deviates from its original course. By recording and analysing this deviation it is possible to detect the intraplate stress levels of Earth's tectonic plates. From these recordings, Orbis detectors create 3D images of these stress levels and allow us to predict earthquakes up to 8 hours before they strike.

The Orbis service consists of three main components: A mesh of low-cost muon flux detectors that are installed in public buildings across seismic regions, a data collection network that processes the muon activity data and a consulting service that assists with emergency responses and crisis management planning. The low cost detectors are installed inside server racks that are located in public buildings and educational institutions such as libraries, universities, medical facilities or emergency services. This network of sensors allows Orbis to predict the exact location of imminent earthquakes. Once the prediction is confirmed the government in question can alert citizens and initiate its emergency strategy. Disaster relief teams can be mobilised in time to help citizens find shelter in temporary camps that are stocked with supplies. Orbis amplifies its impact by partnering with social media and location services, enabling the service to share vital information with users.

Orbis aims to shift response times by establishing a prediction system, increasing emergency preparedness and significantly improving the overall response coordination. With the aid and foresight provided by the Orbis system, emergency response teams can function more efficiently. This way, people could already be in shelters by the time the earthquake strikes, helping citizens stay safe. These preventative measures could also keep down expenses fo

https://drive.google.com/file/d/1KHAReg81Clru8Zuz500FL6b6JlQ6RfgP/view?usp=sharing

ENERGY, INFRASTRUCTURE
& THE ENVIRONMENT
How can we use design to prepare for the world of 2050? Faced with the increasingly dramatic effects of climate change and a global, highly urbanised population of nearly 10 billion, we have explored themes of transportation and mobility, housing and the creation of communities, the provision of food, clean water and sanitation, and the eradication of plastics and pollution.
@RCA Jan. 2019
GRAND CHALLENGE
380 students
16 CERN mentors
74 teams
4 winners
Continuation
Experiments:
Data from designers
SCI DESIGN
Virtual coaching

PLOC, NARI, CURESCAN and KNOWTRITION **visit CERN MON & TUE**

Dharavi, Mumbai

https://www.laurea.fi/en/degree_programmes/cern-bootcamp/

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CERN Bootcamp: solutions to big questions

Master's students from three universities of applied sciences participated in an intensive week at the CERN research organisation.

Read more about Cern Bootcamp →

+++DATA
innovation collaborations