

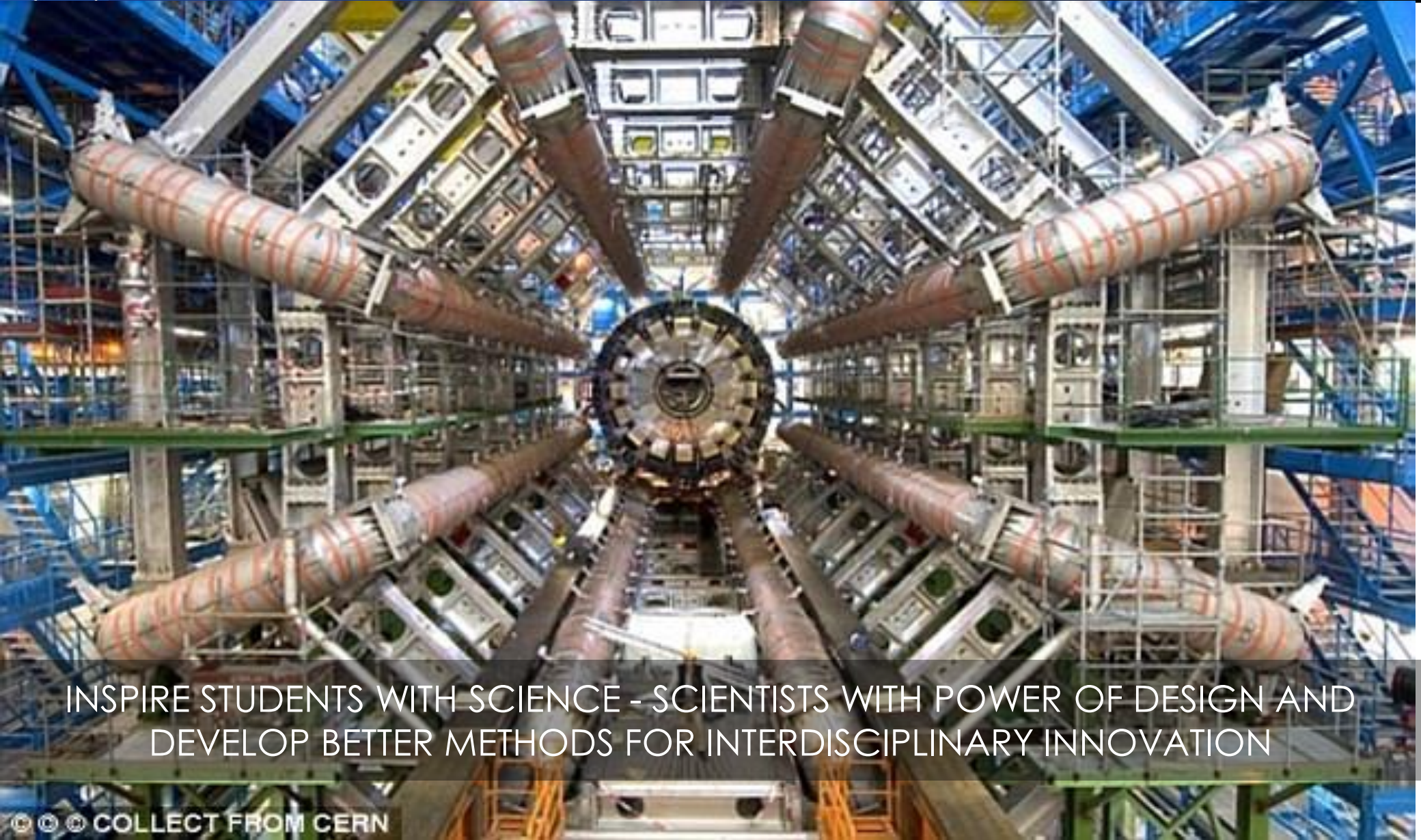


RCA – CERN COLLABORATION 2018

COLLIDING SCIENCE WITH DESIGN
FOR SOCIAL AND ENVIRONMENTAL
TRANSFORMATION



OPPORTUNITY TO WORK WITH SCIENTISTS AND TECHNOLOGISTS FROM CERN TO ADDRESS SOME OF THE BIGGEST ISSUES FACING OUR COMMUNITIES AND PLANET



INSPIRE STUDENTS WITH SCIENCE - SCIENTISTS WITH POWER OF DESIGN AND DEVELOP BETTER METHODS FOR INTERDISCIPLINARY INNOVATION

SHARED GOALS

- Forge new models in interdisciplinary innovation
 - Connect scientists with designers through shared missions
 - Engage the school of design's students - from Innovation Design Engineering to Fashion and Textiles – to develop solutions to the grand challenges we face
 - Engage industry and other academic partners in the innovation process
 - Test existing models for interdisciplinary innovation through this process
- ➔ **Develop new models For Interdisciplinary Innovation as a result with evidence from project outcomes to instantiate these**



COLLIDING SCIENCE WITH DESIGN



RCA WINNING TEAMS TO ATTEND SHOWCASE EVENTS AND BRIEFINGS AT CERN IDEASQUARE AND LHC AND CULMINATES WITH A LARGE SCALE SYMPOSIUM

SURVEY: THE EMERGING THEMES

- Health and Wellbeing
 - Mental health
 - Sedentary lifestyles
 - Hunger and nutrition
 - Medical research
- Impact of digital technologies
 - Security and privacy
 - Mental health and issues of addiction
 - Degradation and Freedom of the press
 - The future of work
- Social and economic disparity
 - Gender inequality
 - Future of Education
 - Decent work and economic growth
 - Justice
- Energy and the Environment
 - Our cities, housing and communities
 - Clean water and sanitation
 - Clean energy production, distribution and consumption
 - Use of resources and circular economy

TECHNOLOGIES WE'LL EXPLORE

- Imaging technologies (health)
- Artificial Intelligence and machine learning (from accelerating medical research to supporting refugees and their diverse needs in an era of massive population shifts)
- Data science and management (from sustainable cities and energy management to health)
- Socially responsible IT platforms (mental health, privacy and security)
- Cloud based infrastructure
- IOT / sensor technologies/ motion tracking (health, cities and energy)
- Cooling and ventilation (housing)
- Institutional Governance: to identify and address issues of gender inequality and under utilization of social capital

TIMELINE

OCTOBER

- Introduction to the brief and team formation
- Hack day 23 October

NOVEMBER

- On-going tech briefings via Skype and in person
- Ideation and further development following the hack day

DECEMBER (LAST TWO WEEKS OF TERM)

- Development Phase
- Documentation of Methodologies – learning barriers, opportunities

JANUARY (FIRST TWO WEEKS OF TERM)

- Large Scale Symposium with Science Museum / Design Museum timed with RCA WIP Show
- Analysis of findings and preparation for publications and research conference on Trans-disciplinary research methods facilitated by our PhD team

FEBRUARY

- Visit of winning teams to CERN for showcase event
- Showcase and publication of interdisciplinary innovation findings