

From open science to open innovation The ATTRACT Initiative

Seeking potential partners

Europe's Research Infrastructures have developed a unique, cutting-edge expertise in detector and imaging technologies – with applications to medicine, materials, aerospace, ICT, engineering and beyond. CERN, ESADE Business School and Aalto University are spearheading an effort to 'co-innovate' new detector and imaging technologies, products and services with other potential partners – in industry, education, research and policy.

The aim: To create next-generation detector and imaging technologies and to spark a new wave of young entrepreneurs, small ventures and innovative services in these vital technologies that can support growth and jobs for years to come.

Why detectors and imaging?

The Higgs Boson wasn't so much 'discovered' as 'detected' by CERN in 2012 – and for that, a complex set of technologies were deployed to sense, visualise and analyse the particle collisions. Similar technologies are in play at other major RI across the EU, from Culham in Britain to Trieste in Italy. Their value goes far beyond basic science alone; they have contributed to the development of hospital PET and CT scanners, touch screens for mobile phones, catalytic convertors for cars, dental lasers, new cancer therapies and more. This is an enabling technology of growing importance to the global economy.

What is ATTRACT?

Working together, CERN, ESADE and Aalto are considering a new, pan-EU initiative to accelerate the development of these technologies – through a process of co-innovation with other RI, SMEs, industry and universities. The aim: to work with scientists, students, entrepreneurs and investors to invent new services and products, and attract new investment to the sector. A pilot effort is already underway at CERN's Geneva campus, with the aid

of Aalto, the leading Finnish university with a world-class reputation for design innovation and management. And at international business school ESADE in Barcelona, Associate Professor Henry Chesbrough – the man who first coined the term 'open innovation'- is developing a new framework for scaling up this kind of collaboration at scientific establishments. It is a 'co-innovation' framework that can be used more generally for converting open science to open innovation.



Why ATTRACT?

The European Commission has expressed a need to encourage Research Infrastructures to act as early adopters and developers of forefront technology, to promote R&D partnerships with industry, and to stimulate the creation of innovation clusters. Through a co-innovation plan like ATTRACT, RI can act as forefront innovation generators for the European society. The ATTRACT partners believe this can be a significant addition the EU's Horizon 2020 programme and beyond.

The outcome: Creating breakthrough, open innovations in health, energy and ICT within the next 10 years – and building a more entrepreneurial, innovative Europe in a strategic sector.

CERN, ESADE and Aalto are seeking potential partners:

- Other major European research facilities that want to innovate in detector and imaging
- SMEs, corporations and investors that want to exploit new ideas and commercial opportunities
- Universities that want to train a new generation of scientists and entrepreneurs for this sector
- Regional and national authorities that want to get more value from their RI investments

• The European institutions with a mandate, in Horizon 2020 and other programmes, to pioneer new methods of co-innovation

A meeting of a working group will be organized in Spring 2014 to consider next steps. Please contact markus.nordberg@cern.ch for more information.







