The ATTRACT initiative























ATTRACT: From Open Science to Open Innovation

- European RIs have succeeded in establishing the paradigm of Open Science, establishing an extended ecosystem, where the research communities are fostering a culture of mutual trust, balancing competition and collaboration.
- Their potential to generate innovation is largely untapped, due to the lack of a corresponding ecosystem at the European scale, which needs to include also the private sector (industry, investors, entrepreneurs).
- The lack of such an eco-system impairs the development of policies of adequate scale, and it is one of the main causes of the declining competitiveness of Europe in innovation.



ATTRACT: Political Context

- The EC is increasingly emphasizing the role that European Research Infrastructures (RIs) need to play as innovation engines.
- Pan-European and National RIs represent an enormous potential as well as investment in people and resources.
- Key question: Is it used optimally?
- Could RIs work together to make it work better?





ATTRACT: A New Innovation Ecosystem

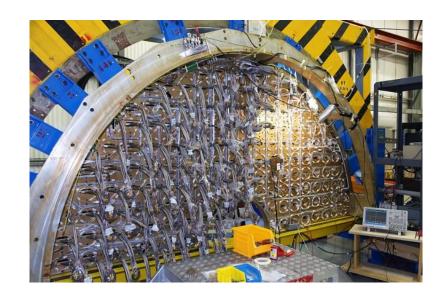
A pan-European ecosystem of opportunities:

- □ For serving the RIs and their R&D communities in their mission, while...
- under und industrial and societal value out of fundamental science and ...
- ☐ ... stimulating the talent of young professionals.



ATTRACT: Philosophy

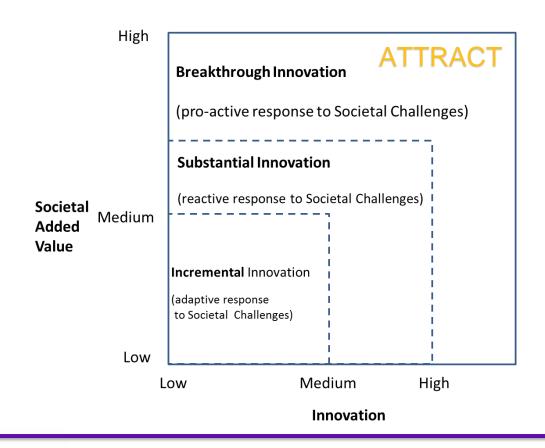
- Pursuing the limits of Fundamental Science generates breakthrough technologies.
- Within the right ecosystem these technologies can systematically generate innovations capable of transforming our society and responding to societal challenges.
- These transformations increase our social wealth as citizens.





ATTRACT: Pro-active Response

Breakthrough innovation anticipates future societal needs.





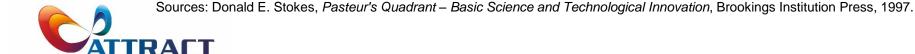
ATTRACT: Main Strategic Actors

Value Extractors **Business & Innovation Experts** Research ESADE Infrastructures /alue Generators **Business School** Risk absorption **ESRF** Public & Private Investment **European Commission EMBL** The success of ATTRACT will not be possible without Industry European **XFEL** EC support specially in its eirma ramp-up phase. Value Captors



ATTRACT: Why Research Infrastructures, Industry and Business and Innovation specialists together?

Pure Basic Research User-inspired Basic Research High **ATTRACT's quadrant** co-innovation paradigm Quest for **Bohr Quadrant** Pasteur Quadrant fundamental scientific research that both understanding seeks fundamental **Applied Research** understanding of scientific problems, and, at the same time, benefits to society. Low **Edison Quadrant** High Low **Use-inspired** Research



ATTRACT: Paradigm

Balancing collaboration and competition

- ATTRACT aims for facilitating the transition from Open Science (RIs) to Open Innovation (Industry).
- Proposes a new *co-innovation* paradigm between Industry and RIs.
- Co-innovation breaks with the traditional procurer-buyer model and proposes a strong cooperation from the beginning of the innovation value chain on identified win-win technology and business opportunities.

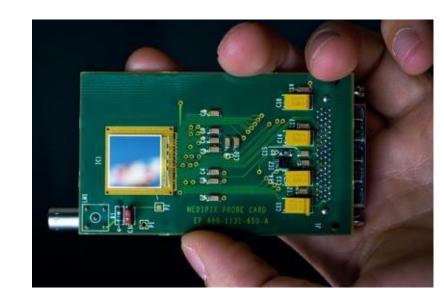




ATTRACT: Technology Focus

Focus on detection and imaging technologies

- They are the backbone for European RIs and their R&D communities.
- They are the core of future industrial developments, applications and business.
- Detection and imaging technologies allow for the emergence of fast innovators especially SMEs.





ATTRACT: Technology Focus

- Detection and imaging technologies will be critical for the future of European competitiveness and jobs.
- Key European industrial players will leverage on them to gain a crucial competitive advantage.
- They will enable profound social transformations.









ATTRACT: Business Angle

Fostering entrepreneurship

- ATTRACT is not an initiative with an exclusive focus on technology development.
- ATTRACT aims to create new paradigms for innovation with the contribution of innovation experts.
- Business Schools, Innovation hubs and entrepreneurship experts are key and together with RIs and industry on the driving seat from start.





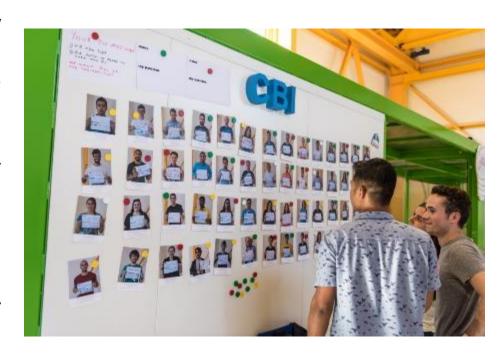




ATTRACT: Young Talent

An instrument for the young talent

- ATTRACT aims to create a new pathway to favour innovation linked to entrepreneurship and "out of the box" thinking.
- This philosophy will be specially oriented to young talent in Europe.
- CERN (IdeaSquare), Aalto (Design Factory), ESADE (Creapolis) among many other ATTRACT supporters already have dedicated pilot experiences.





ATTRACT: Timeline (Estimation)

2018 > 2019 > 2020 > 2021

(ATTRACT Phases 1 and 2 prototype for Maxi-ATTRACT)
Implementation Instrument: Horizon 2020 calls

(Maxi) ATTRACT
Implementation Instrument: FP9

ATTRACT implementation is proposed as a phased approach.



ATTRACT: Phased approach (1)

ATTRACT-Phase 1

- Phase 1 (2018- 2020)
 - The ATTRACT Consortium will launch an Open Call for proposals with total value of 17 M.
 - Proposals for projects are requested in the following domains: detectors, front and back end electronics, data acquisition systems and computing, software and integration.
 - The call will be open in August and close at the end of October.
 - 170 selected projects will be funded with 100 k Euros each as support to develop their idea/concept further.
 - The progress of the projects will be monitored and after 1 year all funded projects will be called to a general meeting in Brussels to present their results.
 - Proposal to be submitted very simple (4 pages) but the submitted ideas must be breakthrough.
 - An Independent R&D&I Committee (IC) of experts from academia and industry evaluates and decides NOT the ATTRACT Consortium.
 - Details of the process can be found here https://indico.cern.ch/event/728232/



ATTRACT: Phased approach (2)

ATTRACT-Phase 2

- Phase 2 (starts 2020)
 - Submission to an expected call in the next H2020 Work Programme 2018-2020 by the ATTRACT Consortium.
 - The best projects selected out of the 170 in phase 1 will receive additional funding; the IC will decide which ones.
 - The funding will depend on how much the EC allocates to the expected call in H2020 2018-20 (could be funding ~ 3 to 4 M Euros to each of 6-7 selected projects).



ATTRACT: Phase approach (3)

Maxi-ATTRACT

- From 2021 and beyond (meaning FP9).
- Mini-ATTRACT phases 1 and 2 will serve as a prototype.
- It is difficult today to say much about how Maxi-ATTRACT will look like, its model, governance, legal framework, etc since we don't know even how FP9 will look like and it will also benefit from the experience gained with ATTRACT Phases 1 and 2.



ATTRACT: Conclusions

- ATTRACT represents an opportunity to place RIs at the forefront of innovation in Europe together with industry and business and innovation specialists.
- It nurtures win-win projects enabled by National and pan-European RIs and industry by balancing collaboration and competition (coinnovation).
- Aligns with and implements the new political paradigm "From Open Science to Open Innovation and Open to the World".
- Creates opportunities for young innovators in Europe.



Thank you for your attention Any questions?

Our website: http://www.attract-eu.org/

