

Innovation Fostering in Accelerator Science and Technology

Particle accelerators deliver huge amounts of energy into tiny volumes of matter at subatomic scale, allowing particle physicists to penetrate into the heart of matter. The byproducts of these activities have a **wealth of applications** from fundamental science to applied science, medicine and industry.

I.FAST aims to allow Europe to develop and enhance leadership in particular accelerators for science and society.

"The particle accelerator community is entering the age of open innovation"

I.FAST will boost innovation in and from the particle accelerator-based Research Infrastructures by developing innovative technologies common to different particle accelerator facilities; and by defining strategic roadmaps for future technological developments. 9 thematic areas for R&D

48 beneficiaries from 15 countries

16 industrial parters

Sustainability & Societal Applications

Industry

next

term growth.

Despite their wide range of applications and high level of maturity and success, particle accelerators face a potentially challenging transition into the future. I.FAST will work to identify and **develop new sustainable accelerator technologies** capable of reaching the performance required by particle physicists at an acceptable impact on society; and to favour the **transfer of key technologies**, developed over the last decades, to particle accelerators used for **applied science** (photon and neutron sources) and for **societal applications** (medicine, industry, environment).







An internal innovation fund contributes to advancing the state-of-art of I.FAST thematic areas.



generation

of

Training

A special traineeship programme allows early-career engineers or technicians to spend time at an I.FAST lab.



Research

Outreach

A challenge-based innovation programme enables students to explore societal applications of accelerators.

PROJECT ACRONYM: Innovation Fostering in Accelerator Science and Technology PROGRAMME: Horizon 2020 (Research Innovation Action) DURATION: May 2021 – April 2025 TOTAL BUDGET: 18.7 M€ TOTAL EC CONTRIBUTION: 10 M€ CONSORTIUM: 48 participants from 15 countries PROJECT COORDINATOR: Maurizio Vretenar (CERN)



An Innovation Ecosystem with

I.FAST brings together a wider and more diversified Consortium, involving **16 industrial partners**, with the goal of establishing a broad **Open Innovation ecosystem** around accelerator-based Research Infrastructures, and provide accelerator science with the tools to face its next challenges. The project will provide European industry with a **portfolio of advanced accelerator technologies**, thus contributing to the construction and upgrade of the

Infrastructures, the creation of jobs, and ultimately long-

accelerator-based

More information: ifast-project.eu

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