

Academia meets Industry event Advanced mechanics

P. Giacomelli (INFN Bologna) INFN Bologna AIDAinnova Scientific coordinator



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Academia meets Industry Valencia April 27th, 2023



Academia meets Industry

Aim:

- Fostering synergies between detector R&D programmes of AIDAinnova members and the industry;
- Creating awareness of strategic R&D topics in academia and of strategic industry needs for which industry-academia collaborations could be envisaged.
- Theme: Advanced Mechanics.
- **Programme:**
 - Technical talks by industry and academic partners;
 - Industrial exhibition for industrial partners;
 - Network cocktail reception.
- Location: Valencia, Spain.
 - **Date:** today!



ill provide state-of-the-ar

ACADEMIA MEETS INDUSTRY **ADVANCED MECHANICS**

The AIDAinnova Industry meets Academia ever n academia and of strategic industry needs for

he first AIDAinnova Academia meets Industry wi us on Advanced Mechanics, and will consist o ical talks by industry and academic work cocktail reception

The event will be hosted by IFIC (UV/CSIC) at ADEI

ndico.cern.ch/event/12315

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VALENCIA, **SPAIN**



AIDAinnova



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- Lithoz (A): ceramics (WP 10)
- Picotech (F): fast RPCs (WP 7)
- Weeroc (F): ASICs (WP 11)
- Workshape (F): composite materials (WP 10)
- CAEN (I): nucelar electronics (WPs 4, 7, 8)
- ELTOS (I): PCBs (WP 7)

- Particle physics applications: industrial scale in view from the beginning
- Earliest possible technology transfer to applications for other markets

Academia meets Industry

- FBK* (I): silicon detectors (WPs 6, 8)
- Conpart (N): metalised polymers (WP 6)
- FYLA (E): ultrafast fibre lasers (WP 4)
- ITAINNOVA* (E): electrom. compatibility (WP 4)
- CSEM* (CH): additive manufacturing (WP 10)
- * RTO (Research and Technology Organisation)



Challenges and opportunities for particle accelerator R&D: the need for industry

Opportunities:

 \succ Strong demand for R&D: accelerators are crucial tools in the progress of modern science and technology (physics, biology, medicine, material science, etc.).

- > Mature technology, with large industry involvement.
- > Supported by a wide, motivated, and rapidly expanding scientific and technological community, spanning across continents.

Challenges:

- resources.

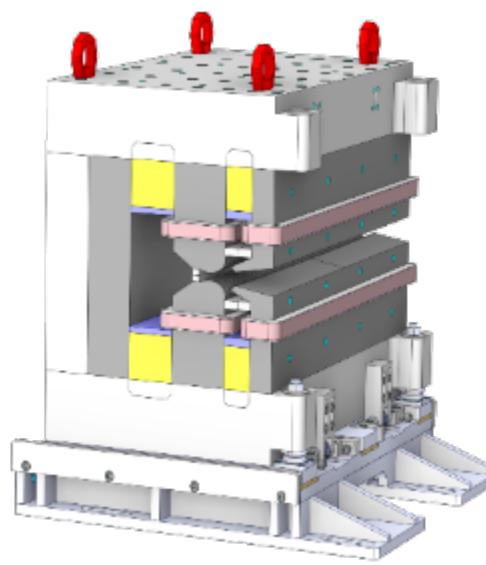


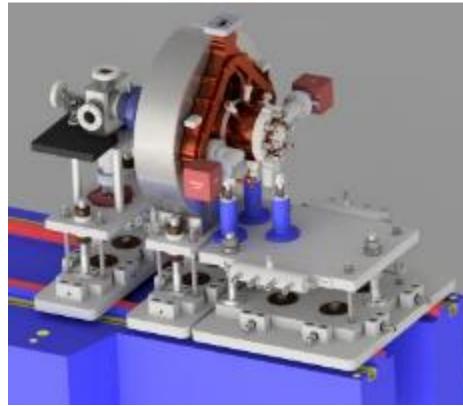
> Presence of many actors, many projects, many technologies, with different priorities and time-scales.

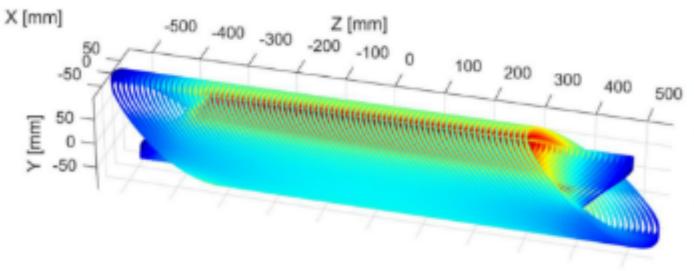
> Long time scale and high cost of accelerator R&D, well beyond the capabilities of single EU projects.

Strong dependence on post-ww2 technologies increasingly faraway from modern industry's focus.

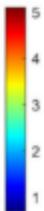
> Needs coordination and sharing











I.FAST Industry participation

Beneficiaries (15):

RHP Technologies (Austria) Bergoz Instrumentation, Thales (France) BNG, Barthel HF-Technik, ILK (Germany), COMEB, KYMA (Italy) VDL-ETG (Netherlands) CYCLOMED, Elytt, Nanoker (Spain) GEMS, Scanditronix (Sweden) TMD Technologies (UK)

Partners (2):

IFAST

Amplitude (France) INEUSTAR (Spain science industry association)

Industry Advisory Board (11)

LEAPS-INNOV has about 60 industrial partners!

IAB Members





el Angel Carrera der and CEO of AVS



nald Dekker





wei Hedbavny O - Vakuum Praha

ik Hrovatin

ivier Tasset - Maye Manager - Sigmaphi



ad Melhom sunder and CEO - Oxford Quantum Solutions Ltd





Total of 28 companies represented in I.FAST



- Co-development between Academia and Industry is of great appeal to us and to the EU
- We look forward to increase our portfolio of industrial partners
- We believe that there is potential of mutual benefits between us and you
- Technology transfer is good for us and society, and has the potential to later be applicable to other markets

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