

3rd Annual Meeting

20th March 2024 Catania

WP2
Communication, Outreach and Knowledge Transfer

<u>Ana Rita Pinho</u> (CERN), Anne Dabrowski (CERN), Beatrice Mandelli (CERN), Antoine Le Gall (CERN), Antoine Laudrain (DESY)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101004761.



Task 2.1 Work Package Coordination

Rita Pinho (CERN)



Objectives

Task 2.1. Work Package coordination

- Coordinate the WP.
- Create a network of Knowledge Transfer Officers (KTOs) within the AIDAinnova beneficiaries and coordinate their work and liaise with KTOs in other Innovation Pilots

Task 2.2. Communication, dissemination and outreach

- Define and implement a communication strategy to address key stakeholders in particle physics.
- Ensure the flow of information within the project (internal).
- Report the results of the project to a wider audience (external).
- Engage the detector community and industry to enhance societal impact of fundamental research.

Task 2.3. Careers of young detector scientists

• Enhance recognition, training and career opportunities for detector scientists.

Task 2.4. Industrial relations and Knowledge Transfer

- Promote co-innovation with industry to demonstrate societal impact of fundamental research.
- Impact analysis of innovation aligned with UN Sustainable Development Goals.



Deliverables & Milestones

| | Deliverable | Due date | Status |
|-------|--|----------|----------|
| D2.1 | Presentation video | M3 | Achieved |
| D2.2 | Final report on career actions for young scientists | M47 | |
| D2.3 | Report on Communication, Dissemination and Outreach | M48 | |
| D2.4 | Impact Analysis | M48 | |
| | | | |
| | Milestones | | Status |
| MS4 | Launching of project website | M1 | Achieved |
| MS6 | Young Scientist Publication Committee | M15 | Achieved |
| MS7 | Analysis of innovations needed in markets and technologies | M12 | Achieved |
| 11.07 | , | | |



Knowledge Transfer Network

- Create a network of Knowledge Transfer Officers
 - 46 beneficiaries, 35 academics;
- Future:
 - KT workshop with the members of the network?





We have compiled a list of TTO. No tech disclosures so far.



Synergies with Innovation Pilots

- Contribute to the RI Innovation Coordination Group:
 - Frequent Meetings (approx. 4 per year)
- Strength interaction with other innovation pilots:
 - Invited talks at LEAPS industry meeting
 - Participation in ALBA event on Industry opportunities in light source
 - TIPP23 conference, talk on behalf of:
 - AIDAinnova, I.FAST, LEAPS-innov, EURO-LABS and EASI-STRESS projects
 - Cryogenics Industry meeting
 - o BSBF 2024





Task 2.2 Communication

Antoine Le Gall (CERN), Antoine Laudrain (DESY)



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Communication channels



Project website aidainnova.web.cern.ch



Mailing lists, including internal newsletter



External newsletter On Track (quarterly).



Participants channels, including social media



EventsWorkshop, conference, nights

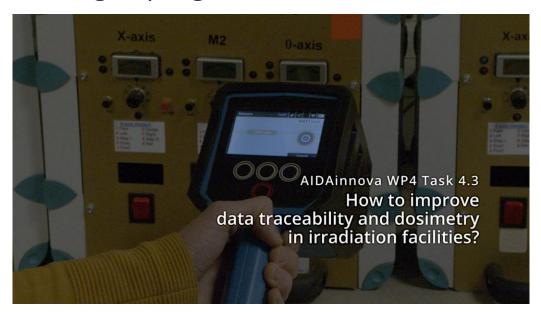
We are here to help. Come to us to make the community more visible!



Results & Societal Impact

WP videos:

- Recorded first interview with focus on the activities at IRRAD.
- Editing in progress.





We are making videos to showcase results with potential applications outside HEP.



Communication over the past year

- Publication committee (explanation & advertisement).
- Announcements (school + hackathon).
- Reports on events (conferences, schools, outreach).
- Synergies with other projects (I.FAST, LEAPS).

We have **one year left**.

It is time to focus on **impact**.



Results/highlights Task 2.2: Output



Logo and branding



Website >5600 unique visitors 20 articles

MS4



Newsletter >400 subscribers 6 issues



On CERN YouTube >5500 views

D2.1

Publication targets (data from Zenodo -> Please contact us!)

| Objectives | AIDAinnova targets | P1 Report | | | |
|--------------------------------|---|---|--|--|--|
| Scientific dissemination | 180 publications including 60 journal publications and 50 conference contributions | 29 publications including 24 journal publications and 5 conference contributions | | | |
| General communication and news | 10 articles in newsletters and other communication channels | 48 articles in newsletters and other communication channels (including 29 on the main website) | | | |
| Other communication | N/A | >20 presentations at international physics workshops, 1 technical report, 2 posters | | | |



Communicating the Annual Meeting

• During the event:

- Social media kit: image template (adaptable) and hashtags (#AIDAinnova; #H2020; @EU_H2020).
- Google Drive to drop the pictures you took during the event.

• After the event:

- Article reporting on the event.
- Articles following contacts (sustainability, society, innovation & more!).





What can AIDAInnova do to build a more effective, engaging communication





A more effective, engaging comms

How can we help:

- **1. Provide** a service Website updates, creation (flyer, poster, video, photo).
- 2. Build a story

3. Disseminate for recognition and funding.

How can you help:

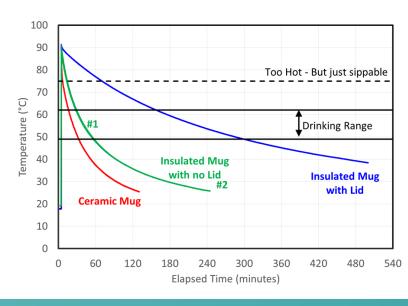
- 1. Explain your activity & find nice stories
- 2. Coordinate your communication with us
- 3. Involve your institute and the beneficiaries you work with



Some progress of the metallic beverage encapsulation unit

- Vintage detector-themed drinkable module.
- Nice metallic touch.
- Capacity of 35 cl.
 - 10 expresso (non-Italian).
 - 30 expresso (Italian).
 - 1 americano.
 - 30 pens.
- Doesn't withstand hydro-electronic culinary decontamination systems (dishwasher) nor microwave.







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Task 2.3. Careers of young detector scientists

Enhance recognition, training and career opportunities for detector scientists.

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AlDAinnova "junior" E-groups

- Reminder e-groups setup for all institutes that can be used / populated to allow for communication:
 - https://e-groups.cern.ch/egroups/EgroupsSearch.do
- AIDAinnova Mattermost channel

| | Name |
|-------------|--|
| \bowtie | AIDAinnova-AGH-junior-scientists |
| | AIDAinnova-CAEN-junior-scientists |
| \bowtie | AIDAinnova-CEA-junior-scientists |
| | AIDAinnova-cern-junior-scientists |
| | AIDAinnova-CIEMAT-junior-scientists |
| | AIDAinnova-CNRS-junior-scientists |
| | AIDAinnova-CONPART-junior-scientists |
| | AIDAinnova-CSEM-junior-scientists |
| \bowtie | AIDAinnova-CSIC-junior-scientists |
| | AIDAinnova-CUNI-junior-scientists |
| \bowtie | AIDAinnova-desy-junior-scientists |
| | AIDAinnova-ELTOS-junior-scientists |
| \geq | AIDAinnova-FBK-junior-scientists |
| | AIDAinnova-FYLA-junior-scientists |
| | AIDAinnova-FZU-junior-scientists |
| | AIDAinnova-IFAE-junior-scientists |
| \bowtie | AIDAinnova-INFN-junior-scientists |
| \boxtimes | AIDAinnova-ITAINNOVA-junior-scientists |
| \bowtie | AIDAinnova-JGU-junior-scientists |
| | AIDAinnova-JSI-junior-scientists |
| \geq | AIDAinnova-junior-scientists |
| | AIDAinnova-LIT-junior-scientists |
| \geq | AIDAinnova-MPG-MPP-junior-scientists |
| | AIDAinnova-NOW-INikhef-junior-scientists |
| \geq | AIDAinnova-NTNU-junior-scientists |
| | AIDAinnova-OEAW-junior-scientists |
| \bowtie | AIDAinnova-PICOTECH-junior-scientists |
| | AIDAinnova-RBI-junior-scientists |
| \bowtie | AIDAinnova-RHUL-junior-scientists |
| | AIDAinnova-TAU-junior-scientists |

| E-groups Goto 31-60 \$ | | | | |
|------------------------|--|--|--|--|
| | | | | |
| \geq | AIDAinnova-UBERN-junior-scientists | | | |
| \boxtimes | AIDAinnova-UBONN-junior-scientists | | | |
| \bowtie | AIDAinnova-UCL-junior-scientists | | | |
| \boxtimes | AIDAinnova-UEDIN-junior-scientists | | | |
| \bowtie | AIDAinnova-UHEI-junior-scientists | | | |
| \boxtimes | AIDAinnova-UiB-junior-scientists | | | |
| \bowtie | AIDAinnova-UNIMAN-junior-scientists | | | |
| \boxtimes | AIDAinnova-UNIVBRIS-junior-scientists | | | |
| \bowtie | AIDAinnova-UOS-junior-scientists | | | |
| \boxtimes | AIDAinnova-UOXF-junior-scientists | | | |
| \bowtie | AIDAinnova-USC-junior-scientists | | | |
| | AIDAinnova-UWAR-junior-scientists | | | |
| | AIDAinnova-UZH-junior-scientists | | | |
| | AIDAinnova-VU-junior-scientists | | | |
| \bowtie | AIDAinnova-WEEROC-junior-scientists | | | |
| | AIDAinnova-WORKSHAPE-junior-scientists | | | |



Results/highlights Task 2.3: Platform for publication

Publication committee set to ensure a well-structured peer-review process and publishing of AIDAinnova documents

•Junior:

- Camila Pedano (CERN)
- Matias Senger (U. Zurich)

•Senior:

- Brieuc Francois (CERN)
- Anna Zaborowska (CERN)

Status:

Publication committee not yet used by AIDAinnova project;

News:

- Brieuc and Anna are stepping down as careers evolve;
- Open place for two young researchers.





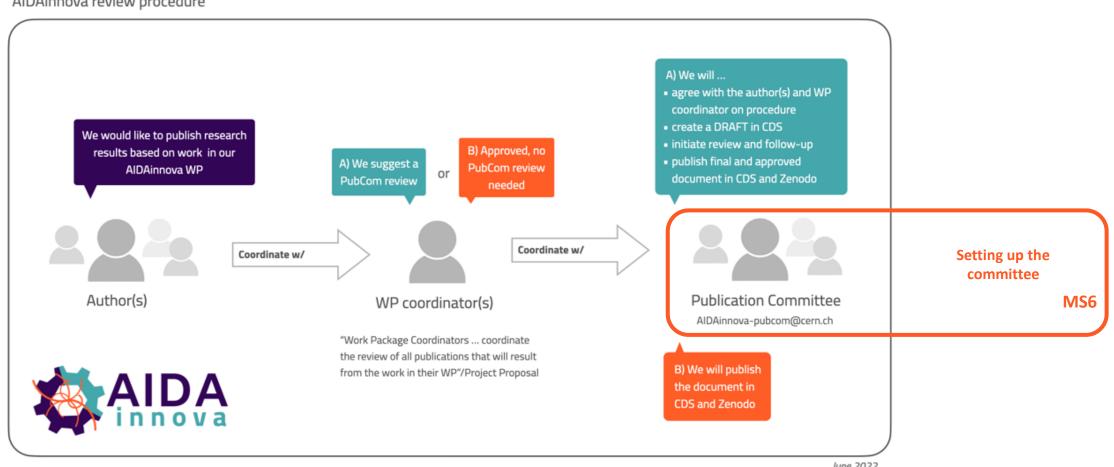






Results/highlights Task 2.3: Platform for publication

AIDAinnova review procedure



June 2022



Input from Young Scientists

We need input on best initiatives to support the careers of young scientists.

Topics to be considered:

- opportunities for young scientists detector seminars;
- competitive scholarships to attend the Annual Meeting:
 - One based on scientific results.
 - One based on outreach.
- opportunities for career or network events:
 - Team up with other events, e.g. LHC Networking Event
 - See whether detector Alumni are included.
 - Advertise job opportunities open inside AIDAinnova institutes
- support with publications;
- training opportunities: careers, CV, soft skills, KT, IP, etc.
- mentoring.
- Explore synergies with ECFA Young scientists community.



Expression of Interest Email to be sent out!



Task 2.4 Industrial relations and Knowledge Transfer

Rita Pinho (CERN)



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Results/highlights Task 2.4: Analysis of innovations

Aim:

- Provide insight into the innovation drivers of particle detectors.
- Look at particle detectors technology trends by R&D area, by industry application.
- Report on relevant policy-making initiatives in the EU and in the USA, focusing on semiconductors.

Methodology:

• Combination of market research, patent database analysis and market survey with AIDAinnova participants and industry.

Conclusion:

- Particle detector market expected to grow by 60% by 2028. Currently dominated by USA,
 Europe and Japan but with growth stalemate and innovation decrease.
- Soon to be disrupted by China: fastest growing region for particle detectors, country with the most patent applications for particle detectors filed since 2016.
- Innovation trends: Dominated by gas ionisation (42%) and scintillation detectors (31%);
 mostly aimed to medical applications.

MS7



Grant Agreement No: 101004761

AIDAinnova

Advancement and Innovation for Detectors at Accelerators
Horizon 2020 Research Infrastructures project AIDAINNOVA

MILESTONE REPORT

ANALYSIS OF INNOVATIONS NEEDED IN MARKETS AND TECHNOLOGIES

MILESTONE: MS7

Document identifier: AIDAinnova-MS7

Due date of milestone: End of Month 12 (March 2022)

Report release date: 17/05/2022

Work package: WP2: Communication, Outreach and Knowledge

Lead beneficiary: CERN

Document status: Final

Abstract:

This report provides an overview of market-innovation trends of particle detectors, both by technology and by market application, as well as a summary of key policymaking initiatives that will impact the market. The methodology used in the first section is a combination of market research, patent database analysis, and market survey with AIDAinnova participants industry participants. The second part of the report summarises recent policymaking initiatives affecting the market, with a particular focus on semiconductors.



What else?

Knowledge Exchange Workshops with Industry and other scientific communities:

- 1 "Academia Meets Industry" event done
- 1 "Industry Workshop on Cryogenics in Big Science" April 2024
- Joint booth & session at BSBF 2024 tbc
- 1 workshop with other TT offices tbd

Technology Disclosures (target is 5)

- Some of the info requested: description of the technology, the problem that it addresses, potential applications outside HEP, how it compare to the state of the art, maturity, etc
- Value propositions of the main results per WP?
 - Description of key technological advancements
 - Applications beyond HEP
 - Target markets and costumers



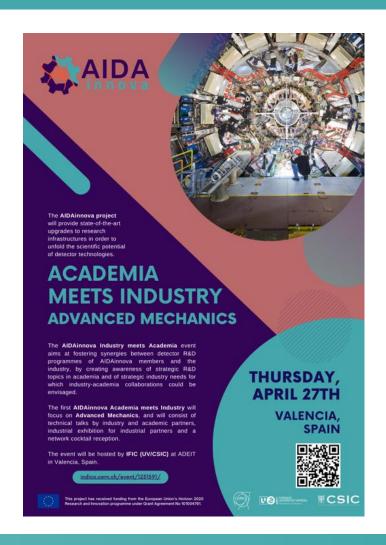
Results/highlights Task 2.4: 1st Academia meets Industry event

• 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: 27th April 2023

→ Small Report completed.

MS5





Industry Workshop on Cryogenics in Big Science

Organised and supported by <u>I.FAST</u>, <u>AIDAinnova</u> and <u>LEAPS-INNOV</u>, the European INFRA-INNOV projects for particle accelerators, detectors, photon science.

- I Session: Technological Developments for Accelerators
- II Session: Technological Developments for Light Sources
- III Session: Technological Developments for Particle Physics Detectors
- IV Session: Technological Developments for Nuclear Fusion

Industry-Academia 1:1 Meetings

- V Session: Upcoming opportunities for Industry
- VI Session: Co-innovation and TT towards new societal applications
- o VI Session: Co-innovation and TT towards new societal applications
- VII Session: Key topics in Cryogenics



https://indico.cern.ch/event/1376314/

→ Coordinators of AIDAinnova, I.FAST and LEAPS-INNOV decided to organise a joint Academia-Industry event.







- → Joint booth.
- → Knowledge Transfer parallel session at the BSBF Trieste is being discussed.



Impact analysis



Next steps:

- Interview WP leaders on AIDAinnova developments:
 - exploitable foreground;
 - lessons learned from industry partnerships;
 - link to UN SDGs;
 (synergies with comms task)
- Report mapping the economic and commercial impact, as well as technological, environmental, social and cultural impacts following UN SDGs (D2.4)

20 March 2024 3rd Annual Meeting - WP2 29



How can you help?

Just a reminder...We want to hear from you!

- Are you a WP leader? Request to prepare a brief document on the foresee Impact of your developments.
- Do you want to do a **tech disclosure**? Talk to us!
- Technology developments with commercial partners.
- Potential applications of your technology beyond HEP.
 - How your innovations could contribute to the UN SDGs.
- Work you're ready to share with the World.
- Early-career researchers seeking:
 - Specific training resources or support.
 - Opportunities to showcase and disseminate their research(e.g. seminar, workshop, conference).



