

2nd Project Review Meeting

20th June 2024
CERN

WP2

Communication, Outreach and Knowledge Transfer

Ana Rita Pinho (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)

- **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.

- **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.

- **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
 - BSBF 2024 (*future*)



Task 2.2 Communication

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

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Project website
aidainnova.web.cern.ch



Mailing lists,
including internal newsletter



External newsletter
On Track (quarterly).



Participants channels,
including social media



Events
Workshop, conference, nights

- **Publication committee** (explanation & advertisement).
- **Announcements** (school + hackathon).

- **Reports on events** (conferences, schools, outreach).
- **Synergies with other projects** (I.FAST, LEAPS).

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



Video to showcase results with potential applications outside HEP.

- Communicating the Annual Meeting






Logo and branding




Website
 >5600 unique visitors
 20 articles

MS4



Newsletter
 >400 subscribers
 6 issues



Introduction video
 On CERN YouTube
 >5500 views

D2.1

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

Objectives	AIDA innova 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

Task 2.3 Careers of young detector scientists

Anne Dabrowski (CERN) ,
Beatrice Mandelli (CERN), Antoine Laudrain (DESY)

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

IVIS6

•**Junior:**

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

•**Senior:**

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

• Status:

- Publication committee not yet used by AIDAinnova project
 - Need should increase as students complete research

• News:


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




Co-organised with CERN EP R&D Poster Session for young researchers.

- 23 posters presented by young colleagues
 - representing work done in 6 AIDAInnova Work Packages
 - Well attended networking event
 - Experienced detector scientists from AIDAInnova on selection committee
- First prize – award to a detector school
- Three 2nd prizes awarded a CERN detector seminar







POSTER AWARDS

Best poster award

Stefania-Alexandra Juks

Mitigating Emissions in Gaseous Particle Physics Detectors: CO₂ as an Eco-Friendly Alternative for RPC Detectors

Ex-quo second prize

Jashandeep Dhalwal

Virtual prototyping of pixel detectors with PixESL framework in High Energy Physics

Marta Lisowska

PICOSEC Micromegas precise-timing gaseous detectors and studies on robust photocathodes

Weronika Gluchowska

Thermalisation of HTS-based current leads using a single-stage GM cooler

EP R&D DAY, MAY 22, 2024

Task 2.4 Industrial relations and Knowledge Transfer

Rita Pinho (CERN)

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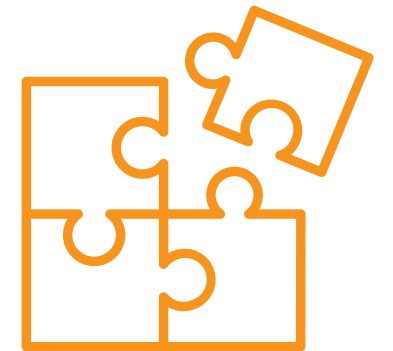
- **Knowledge Exchange Workshops with Industry and other scientific communities:**

- 1 “Academia Meets Industry” Advanced Mechanics event – April 2023
- 1 “Industry Workshop on Cryogenics in Big Science” - April 2024
- Joint booth & session at BSBF 2024 – Oct 2024
- 1 workshop with other TT offices - tbd



- **Technology Disclosures (target is 5)**

- 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



- **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



AIDA
innova

The AIDAInnova project will provide state-of-the-art upgrades to research infrastructures in order to unfold the scientific potential of detector technologies.

ACADEMIA MEETS INDUSTRY ADVANCED MECHANICS


The AIDAInnova Industry meets Academia event aims at fostering synergies between detector R&D programmes of AIDAInnova members and the industry, by creating awareness of strategic R&D topics in academia and of strategic industry needs for which industry-academia collaborations could be envisaged.

The first AIDAInnova Academia meets Industry will focus on **Advanced Mechanics**, and will consist of technical talks by industry and academic partners, industrial exhibition for industrial partners and a network cocktail reception.

The event will be hosted by IFIC (UVICSI) at ADEIT in Valencia, Spain.

indico.cern.ch/event/1231521/

**THURSDAY,
APRIL 27TH
VALENCIA,
SPAIN**





Industry Workshop on Cryogenics in Big Science

Organised and supported by [I.FAST](#), [AIDAInnova](#) and [LEAPS-INNOV](#), 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
- VI Session: Co-innovation and TT towards new societal applications
- VII Session: Key topics in Cryogenics



The poster features a dark blue background with a purple and cyan wave at the top. It includes logos for IFAST, AIDA innova, and LEAPS INNOVATION. A large image of the Eiffel Tower is in the top right corner. The text 'INDUSTRY WORKSHOP ON CRYOGENICS IN BIG SCIENCE' is prominently displayed. Below this, it states the event is organized and supported by I.FAST, AIDAInnova, and LEAPS-INNOV. The dates 'Paris, 16 - 17 April 2024' are listed. A 'Program Committee' list includes names and affiliations such as Johan Bremer (CERN), David Grillot (ITER), and Rita Pinho (CERN / AIDA-INNOVA). A QR code is present on the right side. The address '9A Boulevard Jourdan, Fondation Biermans-Lapôtre, Cité Internationale Universitaire de Paris' is provided, along with the URL 'https://indico.cern.ch/e/CryoWS2024'. A small European Union flag is at the bottom, and a disclaimer mentions funding from the European Union's Horizon 2020 Research and Innovation programme.

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

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

	Deliverable	Due date	Status
D2.1	Presentation video	M3	Achieved
D2.2	<i>Final report on career actions for young scientists</i>	M47	
D2.3	<i>Report on Communication, Dissemination and Outreach</i>	M48	
D2.4	<i>Impact Analysis</i>	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
MS5	<i>Academia Meets Industry Symposium</i>	M24	Achieved

Thanks!

Questions?

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



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

- **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.
 - Mug with logo
- **After the event:**
 - Article reporting on the event.
 - Articles following contacts (sustainability, society, innovation & more!).

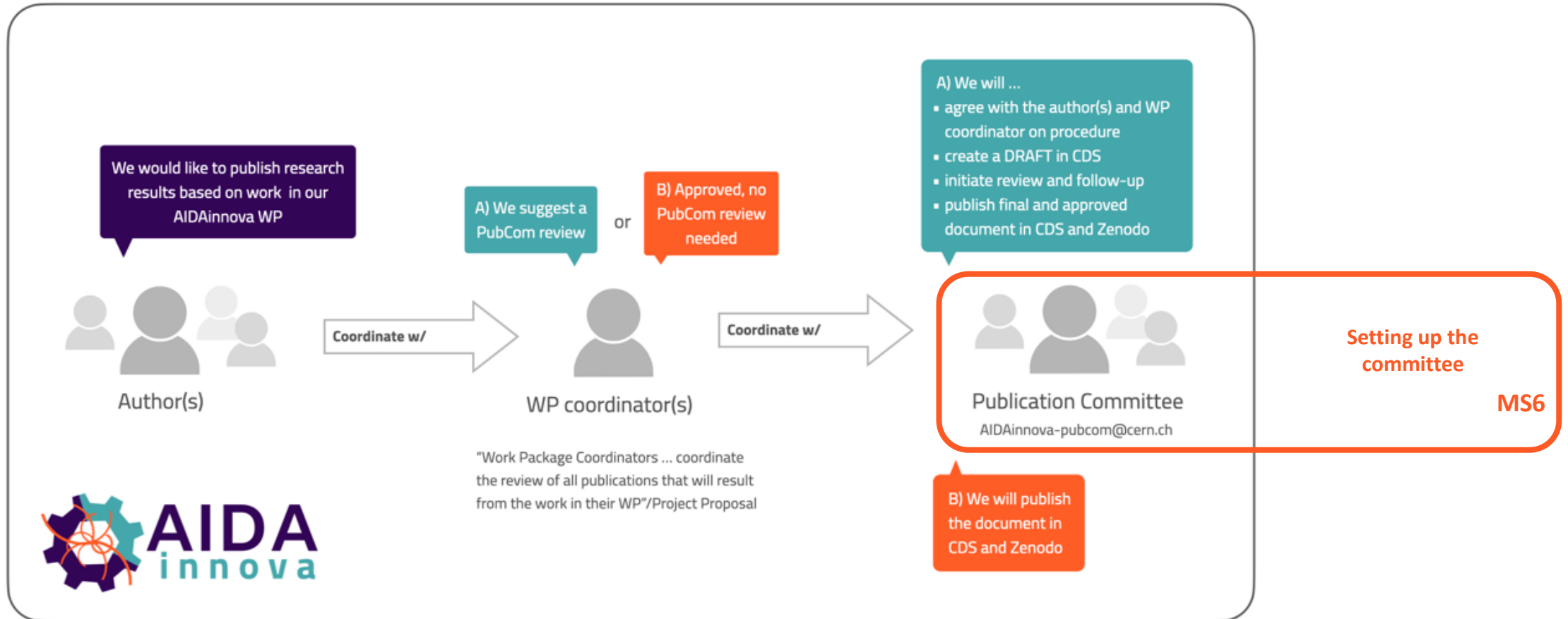


- E-groups setup for all institutes that can be used / populated to allow for communication
 - <https://e-groups.cern.ch/e-groups/EgroupsSearch.do>
- [AIDAInnova Mattermost channel](#)

name
AIDAInnova-AGH-junior-scientists
AIDAInnova-CAEN-junior-scientists
AIDAInnova-CEA-junior-scientists
AIDAInnova-cern-junior-scientists
AIDAInnova-CIEMAT-junior-scientists
AIDAInnova-CNRS-junior-scientists
AIDAInnova-CONPART-junior-scientists
AIDAInnova-CSEM-junior-scientists
AIDAInnova-CSIC-junior-scientists
AIDAInnova-CUNI-junior-scientists
AIDAInnova-desy-junior-scientists
AIDAInnova-ELTOS-junior-scientists
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AIDAInnova-NOW-INIKHEF-junior-scientists
AIDAInnova-NTNU-junior-scientists
AIDAInnova-OEAW-junior-scientists
AIDAInnova-PICOTECH-junior-scientists
AIDAInnova-RBI-junior-scientists
AIDAInnova-RHUL-junior-scientists
AIDAInnova-TAU-junior-scientists

E-groups
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Name
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AIDAInnova-UCL-junior-scientists
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AIDAInnova-UWAR-junior-scientists
AIDAInnova-UZH-junior-scientists
AIDAInnova-VU-junior-scientists
AIDAInnova-WEEROC-junior-scientists
AIDAInnova-WORKSHAPE-junior-scientists

AIDAinnova review procedure



June 2022

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**



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 Transfer
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.



Next steps:

- Survey to Task 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)

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).

