

Milestone: MS4

Date: 30.04.2021

Grant Agreement No: 101004761

# **AIDAinnova**

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

# **MILESTONE REPORT**

# LAUNCHING OF PROJECT WEBSITE

MILESTONE: MS4

**Document identifier:** AIDAinnova-MS4

**Due date of milestone:** End of Month 1 (April 2021)

Report release date: 30.04.2021

Work package: WP1: Project management and coordination

Lead beneficiary: CERN

Document status: Final

#### Abstract:

The AIDAinnova website was launched in April 2021 and can be found at the following address: <a href="http://aidainnova.web.cern.ch/">http://aidainnova.web.cern.ch/</a>



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AIDAinnova Consortium, 2021

For more information on AIDAinnova, its partners and contributors please see <a href="http://aidainnova.web.cern.ch/">http://aidainnova.web.cern.ch/</a>

The Advancement and Innovation for Detectors at Accelerators (AIDAinnova) project has received funding from the European Union's Horizon 2020 Research and Innovation programme under Grant Agreement no. 101004761. AIDAinnova began in April 2021 and will run for 4 years.

## **Delivery Slip**

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Approved by	Scientific Coordinator		30/04/2021



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#### **Executive summary**

This report outlines the scope and structure of the AIDAinnova public website (http://aidainnova.web.cern.ch/).

#### 1. INTRODUCTION

The AIDAinnova public website describes the project activities, objectives and results.

The main purpose of the website will be to act as **central information hub**, including upcoming **events**, recent **publications** on <u>Zenodo</u><sup>1</sup>, **news** and **announcements**. All Deliverables without confidential content will be made available.

#### 2. SCOPE

To meet the needs of different audiences, several target groups were identified before the website design:

Audience	Information needs	Drivers	Channels/Platforms	Outcome
Project participants & admin	Project information; updates on results and work plan	Community spirit; career development	Website, mailing lists, project meetings, including specific programmes for young detector scientists	Engagement with project results; sense of pride
Detector community & scientific community	Main advancements in detector tech; opportunities to collaborate	Scientific excellence; peer recognition; funding	Quarterly newsletter <i>On Track;</i> the beneficiaries' channels	Knowledge sharing, closer collaborations
Industry	Potential knowledge transfer opportunities	sfer   job creation;   event; the beneficiari	Academia Meets Industry event; the beneficiaries' channels	Co-innovations; knowledge and technology transfer, collaborations
Funding agencies & decision- makers	Summary of the results; impact of AIDAinnova	Scientific excellence; economic and societal impact	quarterly newsletter On	Support to funding for fundamental research; support to project community
Public	Societal impact of AIDAinnova tech	Curiosity, societal impact	Social media, presentation video, the beneficiaries' channels; and the organisation of Beamline for Schools.	Support for fundamental research; attracting young generations to science careers

#### 3. CONTENT

#### 3.1. HOME PAGE

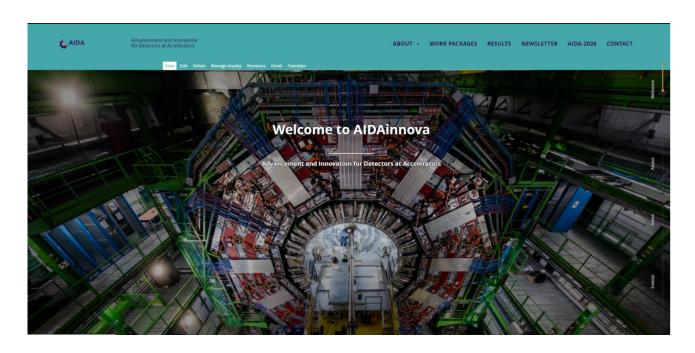
The Home page of the website gives an overview of the news and events of AIDAinnova. It also gives shortcut to the main pages of the website, such as "The AIDAinnova Project", "Work Packages", "Results" and "submit your publication".

<sup>&</sup>lt;sup>1</sup> "Zenodo is an open-access repository developed under the European OpenAire program and operated by CERN.



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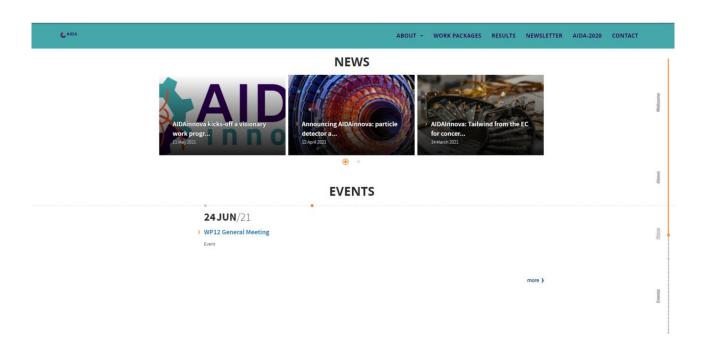
Date: 30.04.2021





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#### 3.2. ABOUT PAGE

The "About" page contains information about the project such as programme, duration, total budget and EC contribution.

It gives an overview of all the different participants involved in AIDAinnova, Academia, Industry and RTOs.

The aim of the project is also described together with the structure of the activities.



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**ABOUT** 

Participants
Related Projects
Project Resource

### **About AIDAinnova**

#### What is AIDAinnova?

PROJECT ACRONYM: Advancement and Innovation for Detectors at Accelerators

**PROGRAMME:** Horizon 2020 (Integrating Activity) **DURATION:** April 2021- March 2025 (4 years)

TOTAL BUDGET: 30 M€

TOTAL EC CONTRIBUTION:10 M€

**CONSORTIUM:** 42 participants from 15 countries **PROJECT COORDINATOR:** Felix Sefkow (DESY)

Discoveries in particle physics are technology-driven; AIDAinnova will provide state-of-the-art **upgrades to research infrastructures**, such as test beams, in order to **unfold the scientific potential of detector technologies**.

The project will run for a duration of four years from **April 2021 to March 2025** and is co-funded by the European Commission under its Horizon 2020 programme.

Due to the need for highly specialised detector equipment, often in industrial-scale numbers, the project will involve eight industrial companies, three RTOs (Research and Technology Organisations) and 34 academic institutions in 15 countries, in co-innovation for **common detector projects**, **strengthening the competence and competitiveness of the industrial partners** in other markets.

The project has a focus on near- and medium-term future projects, as outlined in the European Strategy Update, published in May 2020.

#### Who is involved?

AIDAinnova comprises 45 partners from academic, industry and Research and Technology Organisations from 15 different European countries, and includes CERN. The work is structured across 14 Work Packages.

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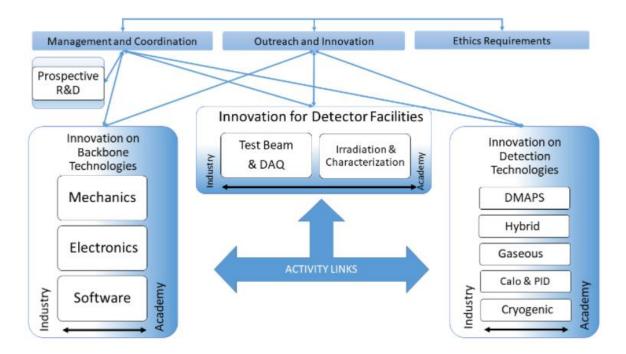
Date: 30.04.2021

#### Aims of AIDAinnova

The key aims of the project are as follows:

- To explore applications of novel technologies such as integrated CMOS sensors, additive manufacturing or machine learning, and to assess their performance for the challenging needs of future or upgraded HEP experiments.
- To strengthen the synergies between different projects and communities, with added value such as optimal
  use of modern concepts in common software frameworks and common prototyping using the latest
  technologies for microelectronics.
- To increase the efficiency and quality of the beam test and irradiation facilities by supporting their upgrades
  and improvements through dedicated Innovation Activities.
- . To render European Industry ready for large series production of HEP detectors.

#### **AIDAinnova Structure**



#### 3.3. WORK PACKAGES

All the Work Packages title and descriptions are stored in the Work Packages page. The first page shows the list of the Work Packages coordinators.

In the subcategories, the Work packages description can be found. It shows the objectives of the Work Package, the tasks, milestones and deliverables linked to the WP.

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WP#	WP Name	WP Coordinator
WP1	Project management and coordination	Felix Sefkow (DESY) Svetlomir Stavrev (CERN)
WP2	Communication, Outreach and Knowledge Transfer	Antoine Le Gall (CERN) Aurelie Pezous (CERN)
WP3	Test beam and DAQ infrastructure	Marcel Stanitzki (DESY) Matthew Wing (UCL)
WP4	Upgrade of Irradiation and Characterization Facilities	Federico Ravotti (CERN) Fernando Arteche (ITAINNOVA)
WP5	Depleted Monolithic Active Pixel Sensors	Sebastian Grinstein (IFAE) David-Leon Pohl (UBONN)
WP6	Hybrid pixels sensors for 4D Tracking and Interconnection Technologies	Anna Macchiolo (UZH) Claudia Gemme (INFN)
WP7	Gaseous detectors	Silvia Dalla Torre (INFN) Burkhard Schmidt (CERN)
WP8	<u>Calorimeters and Particle Identification detectors</u>	Katja Krüger (DESY) Roman Pöschl (CNRS) Roberto Ferrari (INFN)
WP9	Cryogenic neutrino detectors	Dario Autiero (CNRS) Andrzej Michal Szelc (UNIMAN)
WP10	Advanced mechanics for tracking and vertex detectors	Paolo Petagna (CERN) Marcel Vos (CSIC)
WP11	Microelectronics	Christophe De La Taille (CNRS) Angelo Rivetti (INFN)
WP12	Software for Future Detectors	Frank-Dieter Gaede (DESY) Graeme Andrew Stewart (CERN)
WP13	Prospective and Technology-driven Detector R&D	Peter Krizan (JSI)
WP14	Ethics requirements	Felix Sefkow (DESY) Svetlomir Stavrev (CERN)

#### 3.4. RESULTS

All the results, such as deliverables, milestones and publications are appearing in the "Results" page in time-ordered manner, and also on the web pages of the Work Packages concerned. The deliverable and milestones can be found directly on the website, while the publications are stored in Zenodo.

#### **RESULTS**

Milestones
Publications

# **Results**

<u>Deliverables</u>: As a contractual commitment to the European Union, the project has committed to a number of reports known as deliverables, which will be written and publicly accessible from the deliverables page.

<u>Milestones</u>: Throughout the project, milestones or checkpoints indicate the success of the project's progress. The full list of milestones is available on the milestones page, including reports where relevant.

Publications: Scientific publications associated with AlDAinnova work are stored in **Zenodo**. These publications include: journal publications, conference/workshop papers, scientific/technical notes, academic dissertations, posters, presentations and handouts, press articles.

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#### 3.5. NEWSLETTER

The newsletter On track is stored on the AIDAinnova website. With new articles published regularly and a quarterly email summary, On Track provides announcements and results from and to the AIDAinnova and the wider detector communities. On Track is produced by a collaboration between CERN and DESY.



## **OUR TEAM**

Editors:

Daniela Antonio (CERN)
Barbara Warmbein (DESY)

#### **Editorial Board:**

Daniela Bortoletto (Oxford) Paolo Giacomelli (INFN) Felix Sefkow (DESY)



# AIDAinnova kicks-off a visionary work programme for particle detectors at accelerators

A new EU project called AIDAinnova will sustainably develop a variety of innovative particle detector technologies for future experiments at accelerators. Its community came together for the first time from 13 to 16 April 2021 to set in motion the project's work programme.

Past Issues | 11 May 2021



# Announcing AIDAinnova: particle detector advancements for future accelerators

AIDAinnova will play a fundamental role in increasing the precision of particle detection for future particle accelerators.

Past Issues | 12 Apr 2021

#### 3.6. LINKS TO AIDA-2020 AND AIDA

A link to the previous projects AIDA-2020 and AIDA are also provided and gives information about the websites and publications.

#### AIDA-2020

AIDA-2020 website

AIDA-2020 publications

AIDA website

**AIDA publications** 

# **AIDA-2020**



AIDA-2020 brought together the leading European infrastructures and academic institutions in detector development for particle physics, regrouping more than 10,000 scientists. 19 countries and CERN were involved in this programme aligned with the European Strategy for Particle Physics.

With the upgrade of the LHC and its experiments, the community had to overcome unprecedented challenges, which AIDA-2020 addressed. AIDA-2020 advanced detector technologies beyond previous limits by offering well-equipped test beam and irradiation facilities for testing detector systems under its TA programme. Common software tools, microelectronics chips and DAQ systems were also provided. These shared high-quality infrastructures and standards ensured a coherent development by involving experts across Europe.

The enhanced coordination within the European detector community leveraged EU and national resources and contributed to maintaining Europe's leadership in the field.