



AIDA²⁰²⁰

Advanced European Infrastructures
for Detectors at Accelerators

Some update on AIDA++

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AIDA++ France 30/08/2019



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 654168.





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New Call in Horizon 2020

The AIDA-2020 project is due to terminate in 2020

To plan a follow-up, a few categories are part of H2020 calls for 2020;
the one which fits better our characteristics is the INFRAINNOV category

INFRAINNOV: Demonstrating the role of research infrastructures in the translation of Open Science into Open Innovation

INFRAINNOV-03-2020 - Co-Innovation platform for research infrastructure technologies (2020) - This is where ATTRACT phase 2 will be

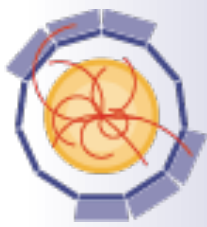
INFRAINNOV-04-2020 - **Innovation pilots** (2020) - ~ 30ME

Innovation in light source technologies

Innovation in detector technologies (->>>> this is at accelerators)

Innovation in accelerator technologies

Deadline March 17, 2020



- We started to use the infrastructure of the present project to start collecting interest of groups / laboratories / institutions for initiatives which could be structured in the new project
- **Call for Expressions of Interest in July 2019**
- **Set up of a temporary Management Team for the new proto-collaboration (mainly based on the present AIDA-2020 management)**
- **About 160 EoIs collected in various detector categories (listed budget is 5x the possibly available one!)**
- Topics Conveners to try to integrate similar EoI among each others

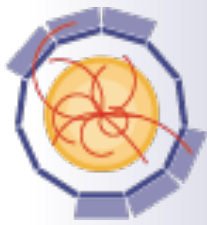


- Test beam Facilities and DAQ: 13
- Irradiation and Characterisation Facilities: 9
- Mechanics & Cooling: 8
- Microelectronics & Interconnections: 5
- CMOS: 10
- Hybrid Silicon Sensors: 20
- Calorimeters 27
- PID: few
- Gas Detectors: 28: MGPD & RPC & large detectors
- Neutrino Detectors : 12
- Software: 17
- Knowledge Transfer and Outreach: 3

Preliminary - informal



- Test beam Facilities & DAQ:
 - M. Stanitzki (DESY), M. Wing (UCL), H. Wilkens (CERN)
- Irradiation & Characterisation Facilities
 - F. Ravotti (CERN), F.Arteche (Zaragosa), G.Kramberger (JSI)
- Mechanics & Cooling
 - Petagna (CERN), C. Gargiulo (CERN), Viehhauser (Oxford)
- Microelectronics & Interconnections
 - De La Taille (Palaiseau), A.Rivetti (Torino), Marchioro (CERN)
- CMOS
 - Grinstein (Barcelona), Caccia (Como), Riedler (CERN), Hempernek (Bonn)
- Hybrid
 - Macchiolo (Zurich), Pellegrini (CSIC), Gemme (Genova)
- Calorimeters
 - Poeschl (LAL), Krüger (DESY), Ferrari (Pavia)



- PID
 - **G.Wilkinson (Oxfrd), E.Auffray (CERN)**
- MPGD & RPC
 - **Della Torre (Trieste), M.Tytgat (Ghent), Mandelli (CERN)**
- Large Volume Gas Detectors
 - **Schmidt (CERN), Grancagnolo (Lecce)**
- Neutrino Detectors
 - **Autiero (Lyon), Rondio (Warsaw), ~~Catanesi~~ (Bari)**
- Software
 - **Gaede (DESY), G.Stewart (CERN)**
- Knowledge Transfer & Outreach
 - **Pezous (CERN)**

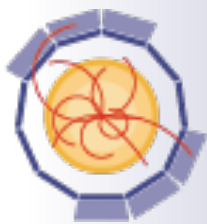
preliminary - informal



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For the Open Day

- Topics Conveners will prepare structured summaries of Eols
 - Summary will be complete, all Eols will be mentioned
 - Eols will be grouped by sub-topics, interconnections and possibilities for cooperation should be pointed out
 - Infrastructure (community added value) and strategic aspects (relevance for future projects) will be underlined
 - Possibilities for Industry participation will be highlighted / summarised
 - A total budget corresponding to envelope of the Eol will be presented (not too useful in my opinion, it is much higher than the available budget)
- Topics are not future Work Packages; they will come later
- Second Open Meeting at the end of October / beginning November
- **March 17, 2020 Proposal submission deadline**



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September 4th open meeting

AIDA++ Open Meeting

Wednesday 4 Sep 2019, 09:00 → 18:55 Europe/Zurich

222/R-001 (CERN)

<https://indico.cern.ch/event/838460/>

Description Preliminary agenda

Videoconference
Rooms

AIDA_Open_Meeting

Join

222/R-001

09:00 → 09:15 **Introduction**

Speaker: Felix Sefkow (Deutsches Elektronen-Synchrotron (DE))

15m

09:15 → 09:35 **Detector Requirements for Higgs Factories**

Speaker: Mogens Dam (University of Copenhagen (DK))

20m

09:35 → 09:55 **Detector Requirements for Hadron machines**

Speaker: Werner Riegler (CERN)

20m

09:55 → 10:15 **Detector Requirements for Neutrino experiments**

Speaker: Michele Weber

20m

10:15 → 10:45

Coffee break





30m

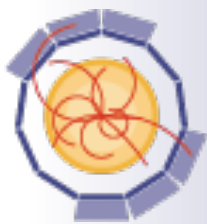


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10:15 → 10:45	Coffee break	🕒 30m
10:45 → 11:05	Involving industry Speaker: Thomas Bergauer (Austrian Academy of Sciences (AT))	🕒 20m 
11:05 → 11:25	Test beam facilities Speaker: Marcel Stanitzki (Deutsches Elektronen-Synchrotron (DE))	🕒 20m 
11:25 → 11:45	Irradiation & characterisation facilities Speaker: Federico Ravotti (CERN)	🕒 20m 
11:45 → 12:05	CMOS Speaker: Sebastian Grinstein (IFAE - Barcelona (ES))	🕒 20m 
12:05 → 13:30	Lunch break	🕒 1h 25m

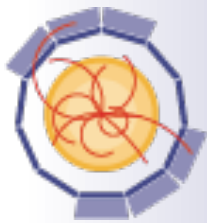


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13:30 → 13:50	Hybrid silicon Speaker: Anna Macchiolo (Universitaet Zuerich (CH))	🕒 20m	📎
13:50 → 14:10	Calorimeters Speakers: Katja Kruger (Deutsches Elektronen-Synchrotron (DE)), Katja Kruger (Deutsches Elektronen-Synchrotron (DE))	🕒 20m	📎
14:10 → 14:30	PID	🕒 20m	📍 222/R-001 📎
14:30 → 14:50	MPGD & RPC Speaker: Silvia Dalla Torre (Universita e INFN Trieste (IT))	🕒 20m	📎
14:50 → 15:10	Volume gas 🏹 Speaker: Burkhard Schmidt (CERN)	🕒 20m	📎
15:10 → 15:30	Neutrino detectors Speaker: Dario Autiero (Centre National de la Recherche Scientifique (FR))	🕒 20m	📎
15:30 → 15:50	Mechanics and cooling Speakers: Corrado Gargiulo (CERN), Corrado Gargiulo (Istituto Nazionale di Fisica Nucleare Sezione di Roma 1)	🕒 20m	📎
15:50 → 16:20	Coffee break	🕒 30m	



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15:50 → 16:20	Coffee break	🕒 30m
16:20 → 16:40	Micro-electronics & interconnections Speaker: Christophe De La Taille (OMEGA (FR))	🕒 20m 
16:40 → 17:00	Software Speaker: Graeme A Stewart (CERN)	🕒 20m 
17:00 → 17:20	Knowledge transfer & outreach Speaker: Aurelie Pezous (CERN)	🕒 20m 
17:20 → 17:35	Next steps Speaker: Felix Sefkow (Deutsches Elektronen-Synchrotron (DE))	🕒 15m 



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September 4th open meeting

If you can, please attend the meeting on Sept 4th

There will be no decisions but discussion will be very useful

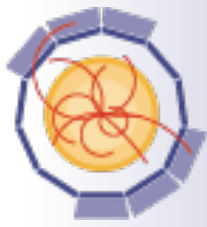
It will give the snapshot of the proposal community

Could be the first right moment to pass our messages

More recommendations:

Please join: AIDA-plus-Eol@cern.ch (general list)

AIDA2020-EOI-IN2P3@cern.ch (our French list)



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September 4th open meeting

Some backup material

ATTRACT

- Emerging communities
- Competitive
- Independent projects
- Fully bottom-up approach
- Break-through development
- Co-innovation for non-HEP markets
- Third-party funding
- Diversifying

AIDA-2020++

- Advanced community
- Collaborative, compete globally
- Interdependent work packages
- Aligned with European Strategy and corresponding roadmaps
- Evolutionary development
- Innovation mainly via pre-procurement R&D for HEP
- Leverage on national funding
- Integrating



Expected calls for proposals

The Excellent Science section “European Research Infrastructures” covers the following calls:

- **INFRADEV** - Development and long-term sustainability of new pan-European research infrastructures
- **INFRAEOSC** – Implementing the European Open Science Cloud
- **INFRAIA** - Integrating and opening research infrastructures of European interest
- **INFRAEDI** – European data infrastructure
- **INFRAINNOV** – Demonstrating the role of research infrastructures in the translation of Open Science into Open Innovation
- **INFRA supp** - Support to policy and international cooperation

For a general overview of the Research Infrastructure theme as well as for more information on these calls you are invited to check out the thematic webpage

<https://www.euresearch.ch/en/european-programmes/horizon-2020/excellent-sciences/research-infrastructures/>