

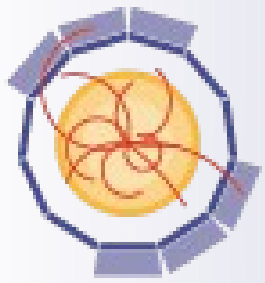
Infrastructure for advanced calorimeters

AIDA2020 Annual Meeting WP14 Introduction

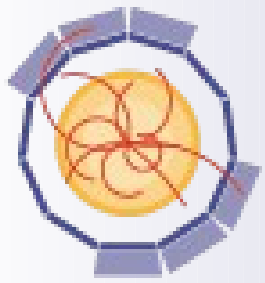
F. Simon, R. Pöschl

AIDA-2020 WP14, Annual Meeting Apr. 3, 2019





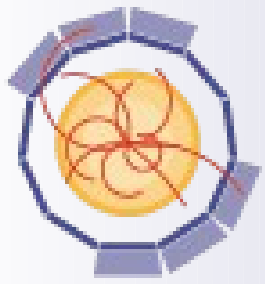
- **14.1** Scientific coordination (MPP-MPG, CNRS-LAL)
- **14.2 Test infrastructure for innovative calorimeters with optical readout**
 - 14.2.1** Test benches for characterisation of organic and inorganic scintillator material (CERN [CERN, RINP, Brunel], INFN [Torino, Roma, MiB, UNIMiB], VU, ETHZ)
 - 14.2.2** Test benches for the characterisation of highly granular calorimeter elements with scintillator and SiPM readout (JGU, DESY [Uni Heidelberg], MPG-MPP, UiB, IPASCR)
- **14.3 Test infrastructure for innovative calorimeters with semiconductor readout**
 - 14.3.1** Assembly and QA Chain for silicon-based ECALs (CNRS [LLR, LAL, LPNHE], CERN [CERN, Imperial])
 - 14.3.2** Infrastructure for very compact Tungsten based calorimetry (DESY [Zeuthen], AGH-UST, TAU [Tel Aviv, IFJPAN], Vinca)
- **14.4 Readout systems for innovative calorimeters**
 - 14.4.1** LC Calorimetry specific DAQ interfaces (IPASCR, CNRS [IPNL, LLR], DESY [Hamburg])
 - 14.4.2** Low Power Readout & Monitoring systems (CNRS [LAL, IPNL], DESY [Hamburg, Uni Wuppertal])
- **14.5 Mechanical and thermal tools for innovative calorimeters**
 - 14.5.1** Precision mechanics for calorimeter structures (CIEMAT [Madrid])
 - 14.5.2** Infrastructure to evaluate thermal properties of calorimeter structures (CNRS [LPSC], DESY [Hamburg])



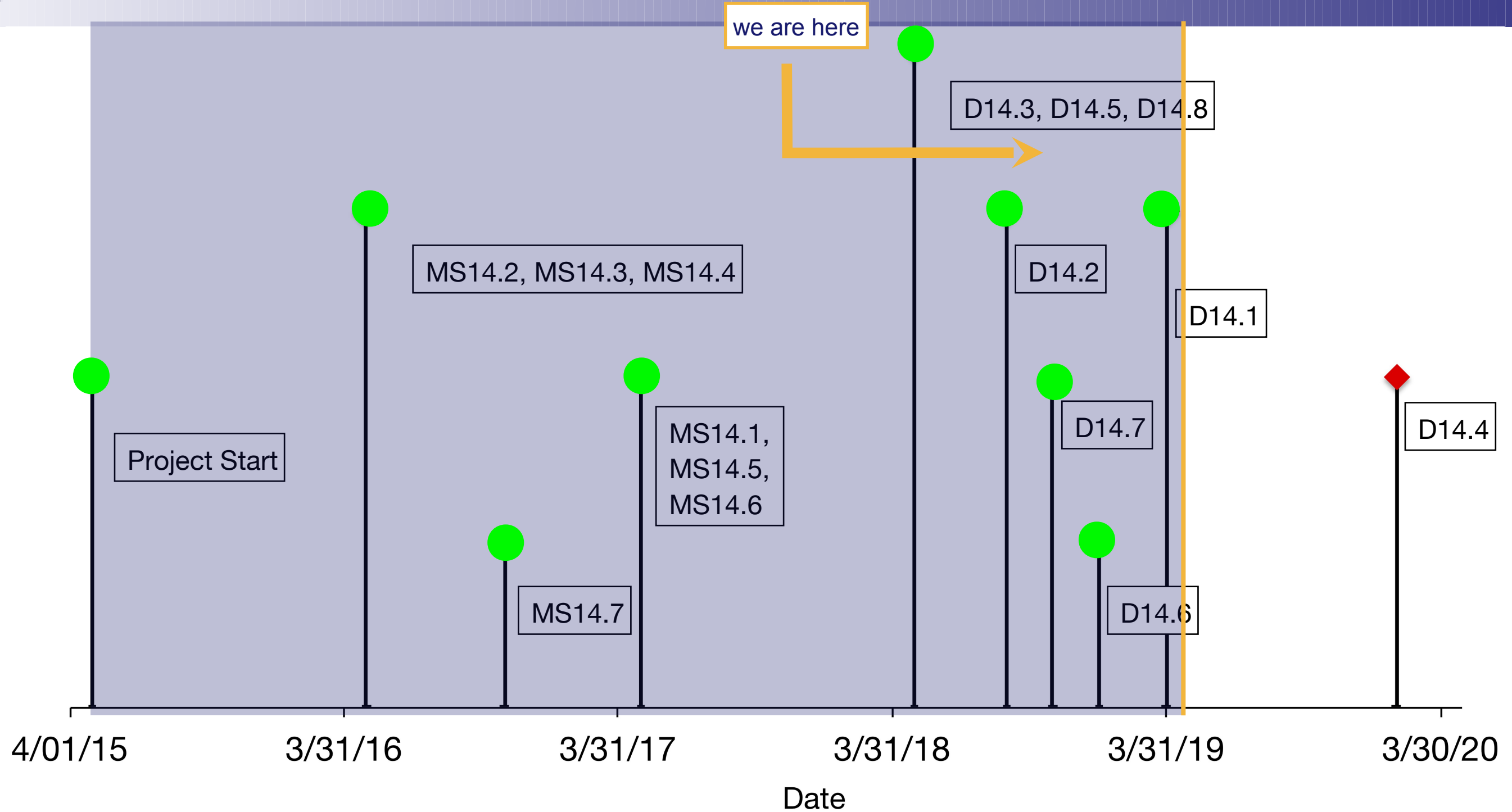
- Beneficiaries

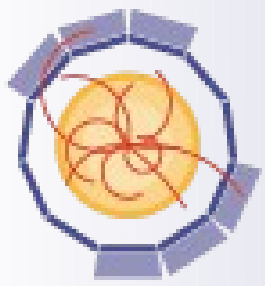
- AGH-UST
- CERN
- CIEMAT
- CNRS - IPNL, LAL, LLR, LPNHE, LPSC
- DESY
- ETHZ
- INFN - MI, RTV, TO
- IPASCR
- JGU
- MPG-MPP
- TAU
- UiB
- VU

- Associated Partners - receive funding through beneficiaries
- CERN: Brunel, Imperial, Minsk
 - DESY: U HD, U W
 - INFN: UniMIB
 - TAU: IFJPAN



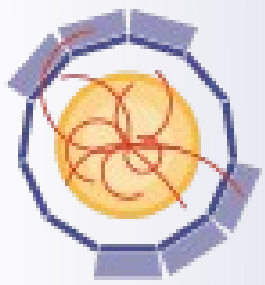
WP14 Timeline





	Title	Lead Ben.	Task	Month
D14.1	Fibre test benches	CERN	14.2.1	47
D14.2	Performance of test infrastructure for highly granular optical readout	MPG-MPP	14.2.2	40
D14.3	Advanced assembly chain for Si calorimeters	CNRS	14.3.1	36
D14.4	Very compact calorimeters	AGH-UST	14.3.2	57
D14.5	Common running of calorimeter prototypes	DESY	14.4.1	36
D14.6	Updated readout system	CNRS	14.4.2	44
D14.7	Electron beam welding demonstrator	CIEMAT	14.5.1	42
D14.8	Large leak-less system, thermal model	DESY	14.5.2	36

- 7/8 of deliverables completed
- Deliverable 14.4 is part of AIDA2020 Extension



- 4th WP14 Face-to-Face Meeting on 10/1/19 at CERN (Traditional Year's Kickoff ;-)
- WP14 enters largely into the “after delivery phase”
- Extension of AIDA2020 allows us to “harvest the fruits” of the work achieved so far
- How will the infrastructures been used?
- We would like to monitor this “harvest” with a first overview at the Annual Meeting
- Tightening of interplay among projects within WP14 but also with other work-packages
 - Overview talks of WP3 (software) and WP5
 - WP14 members are also participating to other WP, want to exploit this fact
- Will/want to contribute to coherent picture on how AIDA2020 shapes the European Detector R&D landscape
- Face-tiFace Meeting allow to obtain first set of subjects for extension
 - More today
 - Items as input for later discussion

Publication Score Board

WP	No. of journal publications	No. of conference/ workshop proceedings	Other publications	Total
WP2	0	0	7 press articles 11 "On track" newsletter issues 1 Academic dissertation	19
WP3	5	1	7 presentations 3 scientific notes	16
WP4	1	2	1 poster	4
WP5	0	2	7 presentations 2 scientific notes 2 posters	13
WP6	23	5	1 poster	29
WP7	19	9	13 presentations 1 scientific note 2 posters	44
WP8	4	3	0	7
WP9	1	0	8 presentations 1 scientific note 1 poster	11
WP13	4	5	4 presentations 7 posters	16
WP14	15	12	19 presentations 3 scientific notes 1 poster	50
WP15	4	7	17 presentations 8 scientific notes 11 posters	47
TOTAL	76	46	134	256
TARGET	60	50	-	180

- The publication record is good
... We are the top of the scoreboard with **50 ubs** out of which 15 journal publications
- Expect more publications as tasks reach their final stages
... in particular Journal Publications
... prefer OpenAccess Journals
Contact us in case of doubt where to publish
- AIDA2020 offers nice tool for publication query
<https://cds.cern.ch/collection/AIDA-2020?ln=en>

Source: <http://aida2020.web.cern.ch/science/publications>

- Please be reminded on the AIDA2020 Newsletter which allows to inform a broader community about your work



OUR TEAM

Editors:

Romain Muller (CERN)
Barbara Warmbein (DESY)

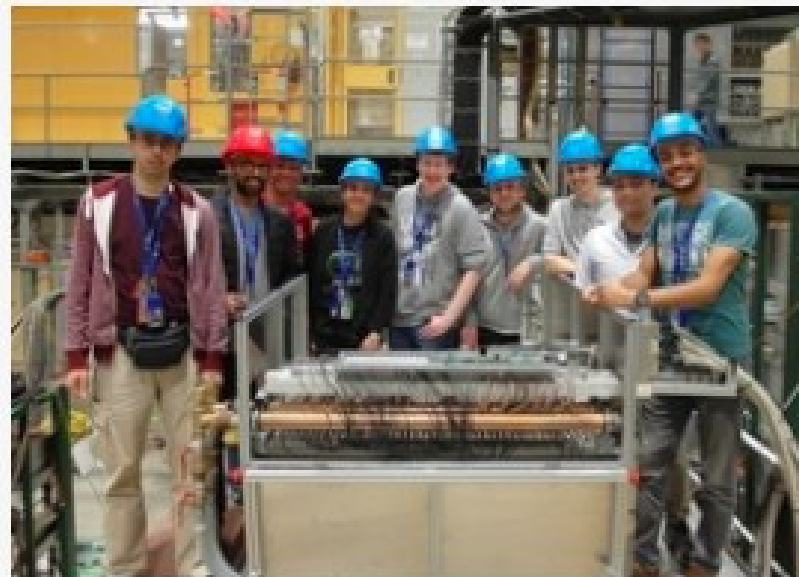
Editorial Board:

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

GET INVOLVED

Want to contribute or have questions?
Please contact
AIDA-2020-newsletter-editor@cern.ch (link sends e-mail) and we will do our best to get back to you as soon as possible.

... or contact
Frank and R.P.



New CALICE calorimeter sees beam

12/07/2018

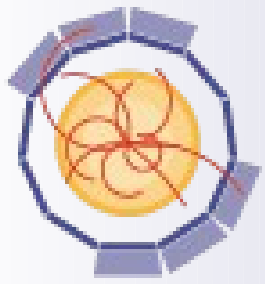
Workpackages come together for a massive test beam campaign at CERN.

e.g. AHCAL (14.2.2) beam test 2018

- **Story on Task 14.2.1 in making**
- Story on Task 14.3.1 in Issue #8 (December 2017)

Can we make an effort such that each task can have a story at the end of AIDA2020?

Source: <http://aida2020.web.cern.ch/science/publications>



- Two task leaders for each task - to provide expertise in
- Work package leaders (and Task 14.1): Roman Pöschl (CNRS-LAL), Frank Simon (MPG-MPP)
- Task 14.2: Etienne Auffray (CERN), Lucia Masetti (J)
- Task 14.3: Vincent Boudry (CNRS-LLR), Marek Idzik (A
- Task 14.4: Katja Krüger (DESY), Dirk Zerwas (CNRS-LAL)
- Task 14.5: MaryCruz Fouz (CIEMAT), Denis Grondin (C
- Technology Transfer Officer (TTO): Etienne Auffray

Publication Score Board

WP	No. of journal publications	No. of conference/ workshop proceedings	Other publications	Total
WP2	0	0	7 press articles 11 "On track" newsletter issues 1 Academic dissertation	19
WP3	5	1	7 presentations 3 scientific notes	16
WP4	1	2	1 poster	4
WP5	0	2	7 presentations 2 scientific notes 2 posters	13
WP6	23	5	1 poster	29
WP7	19	9	13 presentations 1 scientific note 2 posters	44
WP8	4	3	0	7
WP9	1	0	8 presentations 1 scientific note 1 poster	11
WP13	4	5	4 presentations 3 posters	16
WP14	15	9	16 presentations 3 scientific notes 1 poster	44
WP15	4	7	17 presentations 8 scientific notes 11 posters	47
TOTAL	76	43	131	250
TARGET	60	50	-	180

to represent the full breadth of the WP14 community