

AIDA-2020 WP15

Upgrade of beam and irradiation test infrastructure

Federico Ravotti (CERN) & Marcel Stanitzki (DESY)

WP15 Satellite Meeting

<https://indico.cern.ch/event/591285/>

A poster for the 5th Beam Telescopes & Test Beams Workshop. The background is a photograph of a coastal city with a beach and modern buildings. The text on the poster includes the title "5th Beam Telescopes & Test Beams Workshop", the dates "24th - 27th January 2017, Barcelona", and the URL "https://indico.desy.de/event/bttb5". It also lists topics such as "Beam lines & infrastructures", "Beam telescopes & device integration", "Data analysis, tracking, alignment", and "Simulations & software packages". The abstract submission deadline is "23-12-2016" and the registration deadline is "23-12-2016". The organizing committee members are listed as Jan Dreyling-Eschweiler (DESY), Hendrik Jansen (DESY), Joern Lange (IFAE), Iván López (IFAE), Simon Spannagel (CERN), and Stefano Terzo (IFAE).

**5th Beam Telescopes
& Test Beams
Workshop**

24th - 27th January 2017, Barcelona
<https://indico.desy.de/event/bttb5>

Topics:
Beam lines & infrastructures
Beam telescopes & device integration
Data analysis, tracking, alignment
Simulations & software packages

Abstract submission deadline: **23-12-2016**
Registration deadline: **23-12-2016**

Organising Committee:
Jan Dreyling-Eschweiler (DESY)
Hendrik Jansen (DESY)
Joern Lange (IFAE)
Iván López (IFAE)
Simon Spannagel (CERN)
Stefano Terzo (IFAE)



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- The BTTB series has been a very successful format for:
 - test beam & irradiation facilities users
 - beam telescope users
 - facility coordinators
- AIDA-2020 WP15 has a large overlap of activities and participants (Tasks 15.2, 15.3, 15.4) ...
- Upgrade activities in test-beam and irradiation facility (Task 15.5) areas driven by users requirements ...

... natural to meet & take the opportunity of the BTTB week to discuss WP15 matters!

- **Task 15.1:** Scientific coordination (CERN, DESY)
- **Task 15.2:** Improvements of test beam infrastructure for high precision tracking (CERN, DESY)
- **Task 15.3:** Improvements of the DESY test beam infrastructure (DESY)
- **Task 15.4:** Improvements of the test beam infrastructure at LNF (INFN)
- **Task 15.5:** Improvements of the infrastructure for irradiation tests (CERN, INFN, VU, INRNE, JSI, USFD*)

*associated partner linked to CERN

Mil. no.	Milestone name	WP no.	Planned delivery date	Actual delivery date	Status	Comments
MS16	Specifications for IRRAD sample & user management system and online database fixed	15	M12	08/06/2016	Achieved	Report
MS17	Design of a transport system for neutron irradiations of large samples	15	M12	08/06/2016	Achieved	Report
MS32	Pixel telescope hardware assembled	15	M18	31/10/2016	Achieved	Report
MS33	Environmental control system hardware installed	15	M18	24/10/2016	Achieved	Report
MS34	New Frascati beam line components installed	15	M18	M30	Delayed	Justification for delay
MS35	Test of various low cost silicon materials for fluence monitor concluded	15	M18	31/10/2016	Achieved	Report
MS36	Concept of cold box evaluated and design fixed	15	M18	31/10/2016	Achieved	Report
MS37	Design of the additional cosmic trackers on the other side of the source and on the side walls	15	M18	01/11/2016	Achieved	Report
MS59	Silicon strip reference tracker hardware ready	15	M24	(this maybe delayed)		
MS70	Photon tagging components installed	15	M30			
MS85	Installation and commissioning of instantaneous dose rate monitoring system	15	M36			
MS86	Test of the different software modules as event display, camera position tracking and user interface	15	M36			

Del. no.	Deliverable name	WP no.	Planned delivery date	Actual delivery date	Status	Comments
D15.1	CERN pixel beam telescope for the PS	15	M24			
D15.2	Silicon strip reference tracker at DESY	15	M36			
D15.3	Environmental control system at DESY	15	M30			
D15.4	New Frascati beam line	15	M30			(this maybe delayed)
D15.5	Frascati photon tagging system	15	M42			
D15.6	CERN proton facility upgrade	15	M24			
D15.7	Radiation-hard facility instrumentation for the CERN proton facility	15	M44			
D15.8	Cold irradiations at Birmingham	15	M36			
D15.9	JSI TRIGA Reactor Transport system	15	M18	04/11/2016	Achieved	Report
D15.10	GIF++ gas system	15	M24			
D15.11	GIF++ Facility upgrade	15	M48			

- AIDA-2020 comes with a certain amount of paperwork:
 - Annual Reports, Milestone Reports, Deliverable Reports, etc...
 - contractual obligation with the EU
- Deadlines:
 - reports need to be read & edited by WP15 management, AIDA-2020 management before being uploaded on the EU system.
 - expect comments
- Please, have the reports ready at the time we asked them to be! Thanks!

- Becoming more and more important!
 - gets frequently asked/reminded by AIDA-2020 coordination
- 24 records for WP15 in CDS so far (including official reports)
 - <http://cds.cern.ch/collection/AIDA-2020?ln=en>
- Please, let us know about your publications related to WP15 activities:
 - *journal publications, conference/workshop papers, scientific/technical notes, academic dissertations, posters, presentations and handouts, press articles, etc ...*
- and, please, remember the AIDA-2020 acknowledgement text!
 - <http://aida2020.web.cern.ch/science/publications>



AIDA-2020 WP15 satellite meeting during 5th BTTB Workshop

Thursday 26 Jan 2017, 14:00 → 17:45 Europe/Zurich

Residencia d'Investigadors

Videoconference Rooms



AIDA-2020_WP15_meeting_at_BTTB

Join



14:00 → 14:05 **Welcome & Introduction**

5m

Speakers: Federico Ravotti (CERN), Marcel Stanitzki (Deutsches Elektronen-Synchrotron (DE))

14:05 → 14:25 **WP15.2 Improvements of test beam Infrastructure for high precision tracking**

20m

Speaker: Jan Dreyling-Eschweiler (Deutsches Elektronen-Synchrotron (DESY))

14:25 → 14:45 **WP15.3 Improvements of the DESY test beam Infrastructure**

20m

Speaker: Dimitra Tsionou (Deutsches Elektronen-Synchrotron (DE))

14:45 → 15:05 **WP15.4 Improvements of the test beam Infrastructure at INFN-LNF**

20m

Speaker: Claudio Di Giulio (INFN)

15:05 → 15:15 **WP11 - Status of Transnational Access to Irradiation Test Facilities**

10m

Speaker: Marko Mikuz (Jozef Stefan Institute (SI))

15:15 → 15:35 **WP15.5 - Transport system for large objects at Ljubljana JSI TRIGA reactor**

20m

Speaker: Vladimir Cindro (Jozef Stefan Institute (SI))

15:35 → 15:55

Coffee

20m

Test-beams & Tracking

Irradiation Facilities



- 15:55** → 16:15 **WP15.5 - IRRAD Facility Infrastructure Upgrade** 🕒 20m
Speaker: Blerina Gkotse (Université Européenne de Bretagne UEB (FR))
- 16:15** → 16:35 **WP15.5 - Multi-crystalline Si for large fluence Irradiation monitoring** 🕒 20m
Contact-less spectroscopy of thermal emission centers in hadron heavily irradiated and annealed Si
Speaker: Prof. Juozas Vaitkus (Vilnius University (LT))
[Abstract-2017-WP1...](#) [Abstract-2017-WP1...](#)
- 16:35** → 16:55 **WP15.5 - Cold Irradiations at Birmingham Proton Facility** 🕒 20m
Speaker: Michalis Benakis (University of Sheffield (GB))
- 16:55** → 17:15 **WP15.5 - GIF++ Gas System Upgrade** 🕒 20m
Speaker: Roberto Guida (CERN)
- 17:15** → 17:20 **WP15.5 - Cosmic-rays tracker Improvements & augmented reality event-display for GIF++ Facility** 🕒 5m
Speakers: Davide Boscherini (Università e INFN, Bologna (IT)) , Federico Ravotti (CERN) , Giulio Aielli (Università e INFN Roma Tor Vergata (IT))
- 17:20** → 17:25 **WP15.5 - Instantaneous dose-rate monitor for GIF++ Facility** 🕒 5m
Speakers: Federico Ravotti (CERN) , Plamen Stoianov Iaydjiev (Bulgarian Academy of Sciences (BG))
[WP15_Barcelona_D...](#) [WP15_Barcelona_D...](#)
- 17:25** → 17:45 **Discussion & Wrap-up** 🕒 20m
Speakers: Federico Ravotti (CERN) , Marcel Stanitzki (Deutsches Elektronen-Synchrotron (DE))

Irradiation Facilities