

WP10.2: TA DESY- II Test Beam Facility

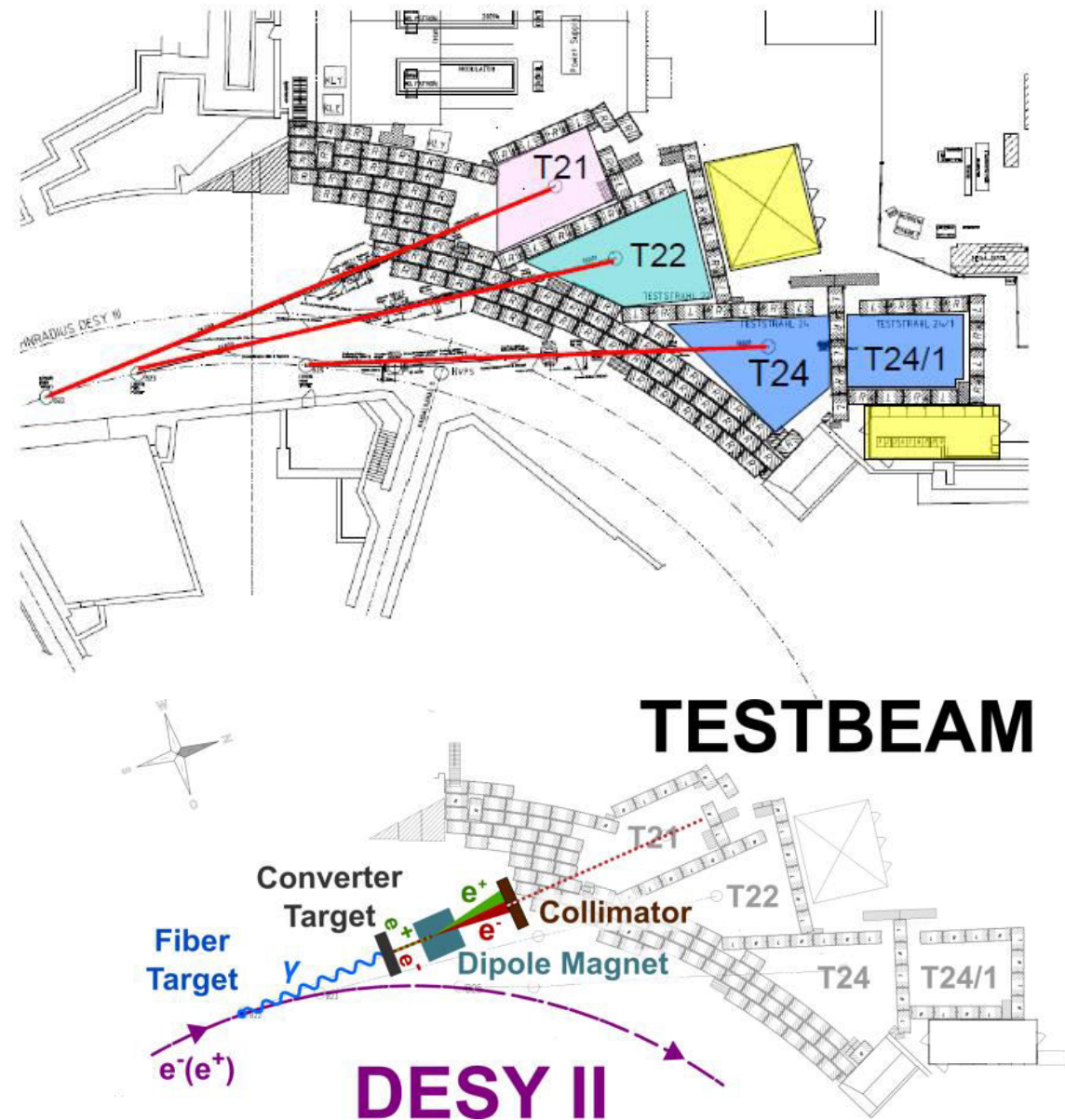
AIDA-2020 Second Annual Meeting



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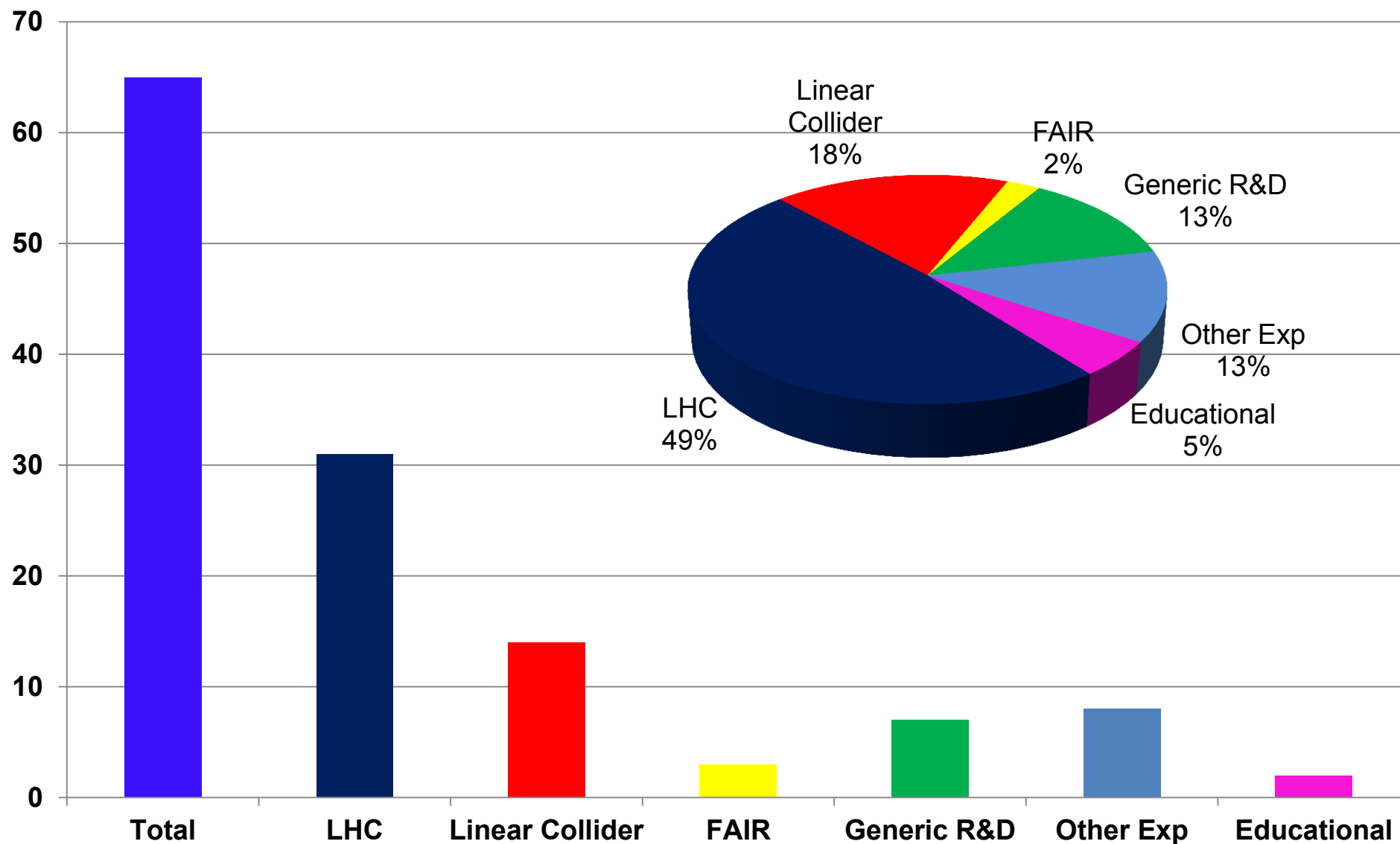
- ✓ Three test beam lines
- ✓ Electron or positron beam from 1-6 GeV (spread: ~5%)
- ✓ Beam Generation:
 - DESY II beam converted into bremsstrahlung at carbon fiber targets
 - Converter target: e^- / e^+
 - Magnet to select particle type and momentum
 - Rates up to several kHz depends on beam line, energy, target material, collimator setting



- All three test beam lines have
 - Interlock systems
 - Magnet control
 - Patch panels with pre-installed cables (Ethernet, BNC, HV, fiber optic)
 - Gas warning systems
 - Fast Internet (1000/100 Mbit) connection (DHCP)
- The user can get
 - Translation stages
 - Premixed gases
- They have to bring
 - Data acquisition incl. computers
 - Trigger scintillators (except T24/1)



Allocated Weeks in 2016



2016 (Done)

✓ Usage

- 39 Projects
- 68 Weeks

✓ Infrastructure requests

- Telescope 69%
- PCMAG 15%
- Gas 10%

✓ Average usage

- Total Slots 105
- Booked 65,7%

2017 (ongoing)

✓ Usage

- 26 Projects (so far)
- 45 Weeks

✓ Infrastructure requests

- Telescope 81%
- PCMAG 19%
- Gas 4%

✓ Average usage

- Total Slots 102
- Booked 33,3%

- Reported after the first AIDA-2020 RP:

	Selected TA-projects	Users supported	Units of access (TB week-hour = 7days with 24 hours)
Foreseen for project (M1-M48):	30	120	8,400 or 50 TestBeam weeks (with 24 hours for 7days)
<i>Thereof non EU-groups</i>			<i>Up to 20% of 8,400 = 1,680</i>
Reported after the first period (M1-M18):	5	54 (41 received financial support)	2,184 / 13 weeks of access units
<i>Thereof non EU-groups:</i>	1	6	<i>672 of access units</i>

Task 10.2 DESY-II Test beam Facility current status

After the first reporting period **6 further TA-projects** had been approved:

AIDA-2020/DESY/2016/04	BELLE-II	(took place)
AIDA-2020/DESY/2016/05	AHCAL	(took place)
AIDA-2020/DESY/2017/01	LHCb	(took place)
AIDA-2020/DESY/2017/02	CMS Tracker upgrade	(End of April)
AIDA-2020/DESY/2017/03	BELLE II	(took place)
AIDA-2020/DESY/2017/04	ALICE_ITS	(took place)

DESY TA: projects current status vs target:

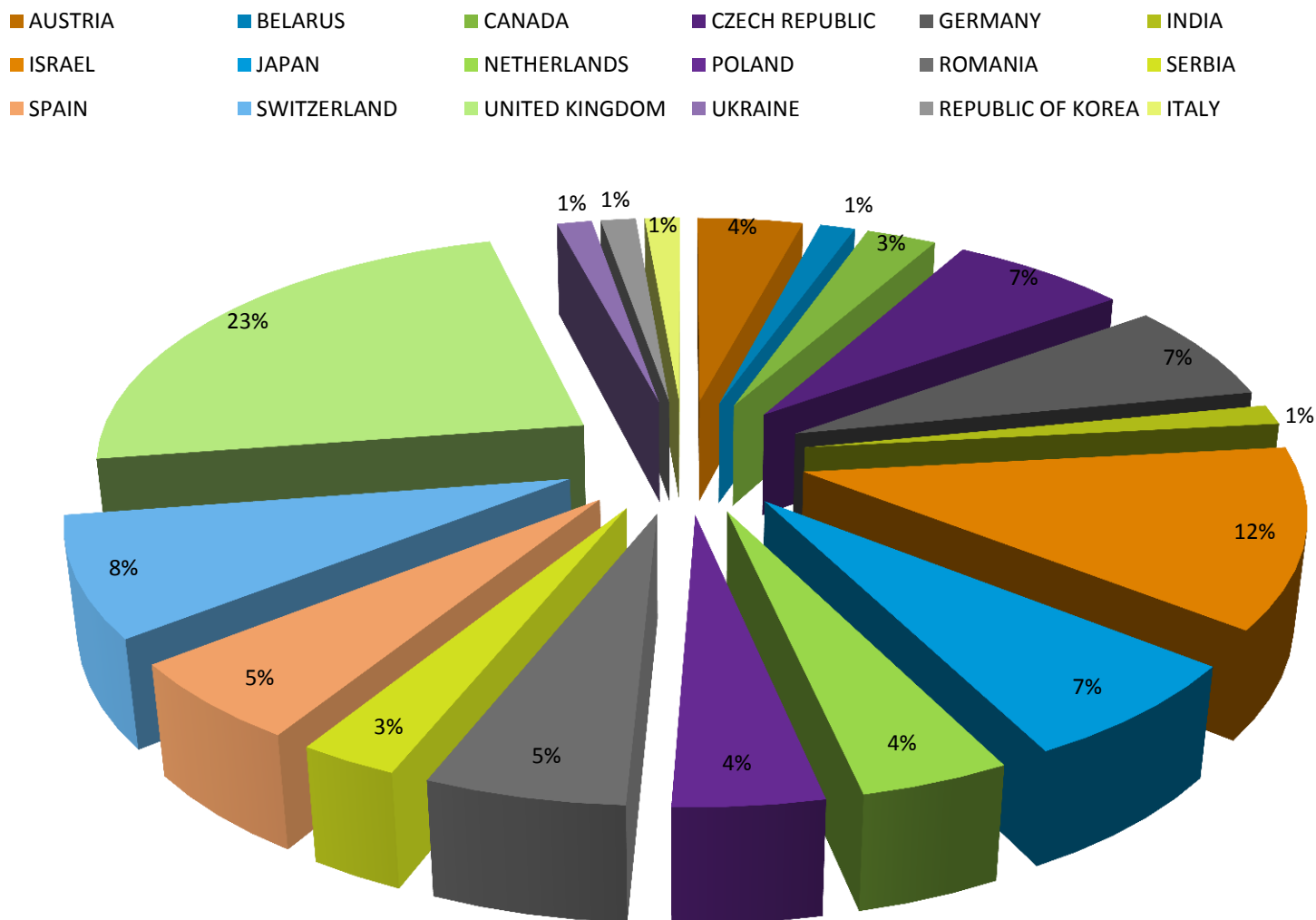
	Selected TA-projects	Users supported	Units of access (TB week-hour = 7days with 24 hours)
Planned in AIDA-2020	30	<u>120</u>	<u>8,400</u> or 50 TestBeam weeks (with 24 hours for 7days)
<i>Thereof non EU-groups</i>			<i>Up to 20% of 8,400 = 1,680 or 10 TestBeam weeks</i>
Current status:	11	<u>73</u> * (57 will receive or received financial support)	<u>3,360*</u> of access units
<i>Thereof non EU-groups:</i>	<i>1</i>	<i>6</i>	<i>672 of access units</i>

TOTAL direct costs for users support in WP10.2 TA DESY:

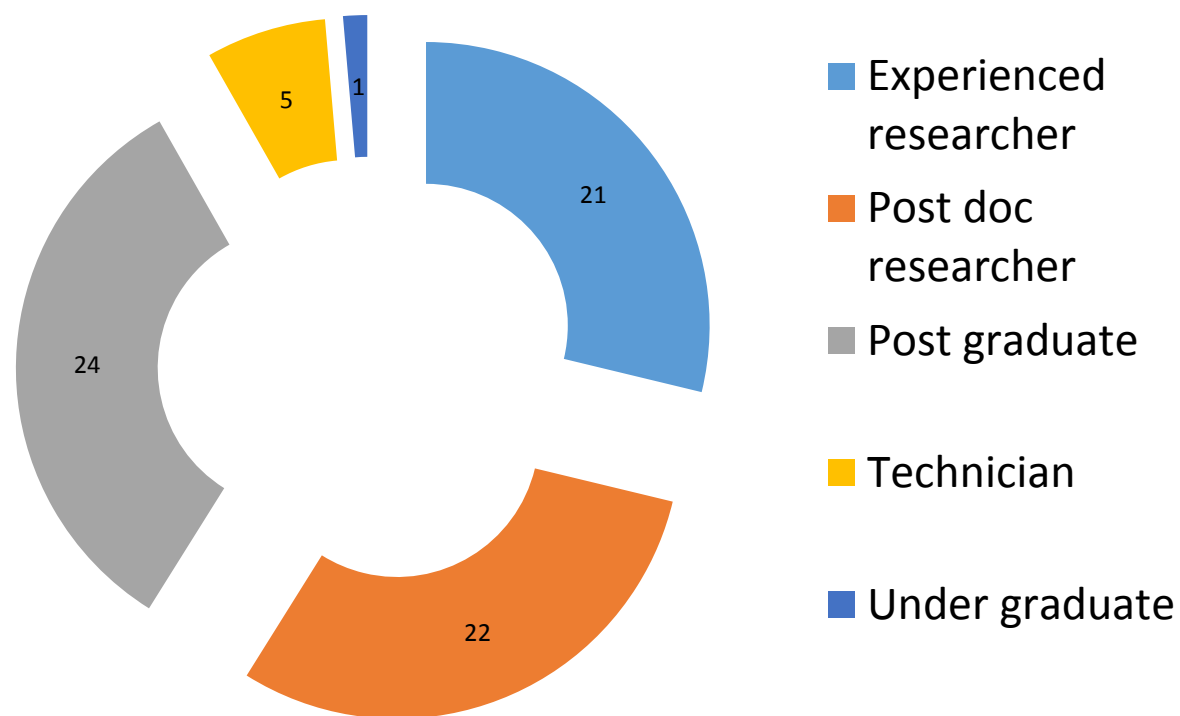
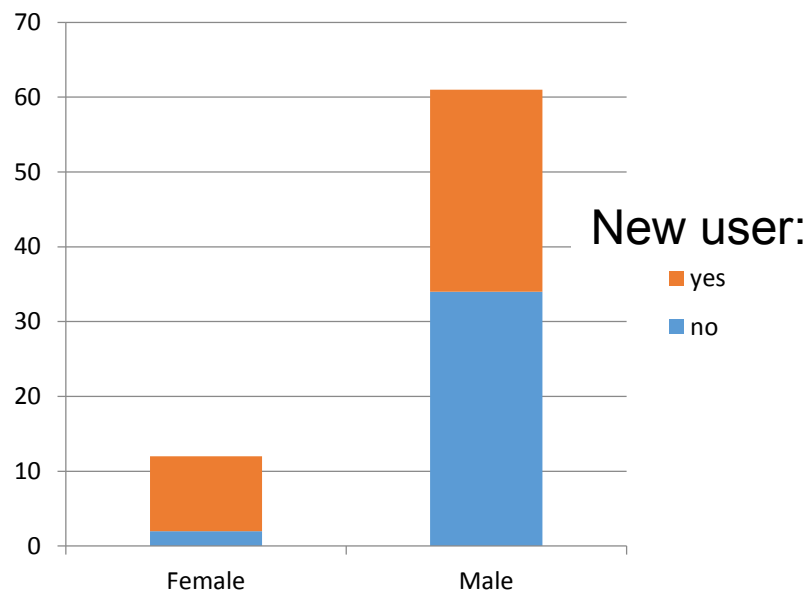
105.000,00 EUR (Target)
~ 43.500 EUR (Actual, but not complete accounted costs)

*) one TA-project out of 11 will take place end of April, therefore here not considered

AIDA-2020 users 2015-2017 by their affiliations country



Average: 6,7 Person pro TA-project



✓ DESY - II Test Beam Facility runs smoothly after the short shutdown (starting from 26.12.2016 till 13.02.Februar 2017): technically as well as administratively

✓ User feedback from 08.03.2017 (AIDA-2020/DESY/2017/01 --LHCb):

“...on behalf of the LHCb-SciFi-Collaboration we would like to thank warmly the Test Beam coordinators for the first class organization and good conditions during our Testbeam campaign in February. The "user-oriented" support was exemplary!...”

✓ DESY video for the AIDA-2020 TA programme is approved

✓ Question to other TAs:

how accurate is your calculation of the Access Units in hours?