

# SFT News

Group Meeting, 23 October 2017

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# EP Retreat 2017

- ❖ The retreat took place last week in Abbaye de Talloires
- ❖ Presentations from experiments and support groups with the achievements in 2017 and prospects for 2018
- ❖ Discussions of the budget and manpower plans
- ❖ Future experiments: SHiP, FCC
- ❖ Physics highlights

Thursday, 19 October 2017		Friday, 20 October 2017	
		09:00	<b>Strategic Developments for EP and CERN</b>
		09:20	<b>Budget discussion</b> - Catherine Decosse (CERN)
09:30	<b>Coffee</b>	10:20	<b>Manpower discussion</b> - Ferdinand Hahn (CERN)
10:00	<b>Introduction</b> - Manfred Krammer (CERN)	11:20	<b>Coffee</b>
10:20	<b>ESE</b> - Philippe Farthouat (CERN)	11:40	<b>ATTRACT First Ideas</b>
10:50	<b>DT</b> - Burkhard Schmidt (CERN)	12:10	<b>TCs common issues</b>
11:20	<b>SFT</b> - Pere Mato Vila (CERN)	12:40	<b>Lunch</b>
11:50	<b>SME</b> - Michael Doser (CERN)		
12:20	<b>Lunch</b>	14:00	<b>SHIP</b> - Thomas Ruf (CERN)
		14:20	<b>FCC</b> - Werner Riegler (CERN)
14:00	<b>ALICE</b> - Pierre Vande Vyvre (CERN)	14:50	<b>Physics highlights of the year</b>
14:30	<b>ATLAS</b> - Christoph Rembser (CERN)	15:20	<b>Discussion and conclusions</b>
15:00	<b>CMS</b> - Tiziano Camporesi (CERN)		
15:30	<b>Coffee</b>		
16:00	<b>LHCb</b> - Andreas Schopper (CERN)		
16:30	<b>LCD</b> - Lucie Linssen (CERN)		
17:00	<b>Neutrino</b> - Manfred Krammer (CERN)		
17:30	<b>AGS</b> - Catherine Decosse (CERN)		

# Strategic Developments for EP and CERN

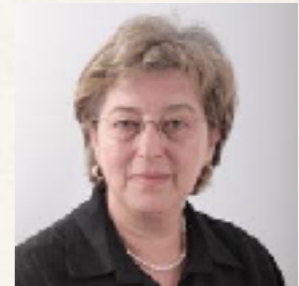
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- ❖ Operation of the LHC and experiments again beyond expectations
- ❖ LHC Phase 1 Upgrades
  - ❖ ATLAS and CMS completing their upgrades
    - ❖ but ATLAS NSW, CMS pixel
  - ❖ ALICE and LHCb undergo their major upgrade
- ❖ HL-LHC
  - ❖ Accelerator upgrade has been approved as a 0.95 bnCHF project
    - ❖ financed out of the annual CERN budget (short term loan)
  - ❖ ATLAS and CMS upgrades have to be ready with accelerator
    - ❖ >0.5 bnCHF that have to be found in the Scientific Community
- ❖ Identify possible synergies inside and outside CERN
  - ❖ Example AWAKE requires precision plasmas

# Update of European Strategy for Particle Physics

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- ❖ To appear in May 2020
- ❖ Secretary has been nominated: Halina Abramowicz
- ❖ New ECFA chair: Jorgen D'Hondt
- ❖ Laboratory Directors group chair: Leonid Rivkin
- ❖ Secretary will soon release the schedule and organisation of the update
  - ❖ expect thorough community discussion in 2019



# Recognized Experiments

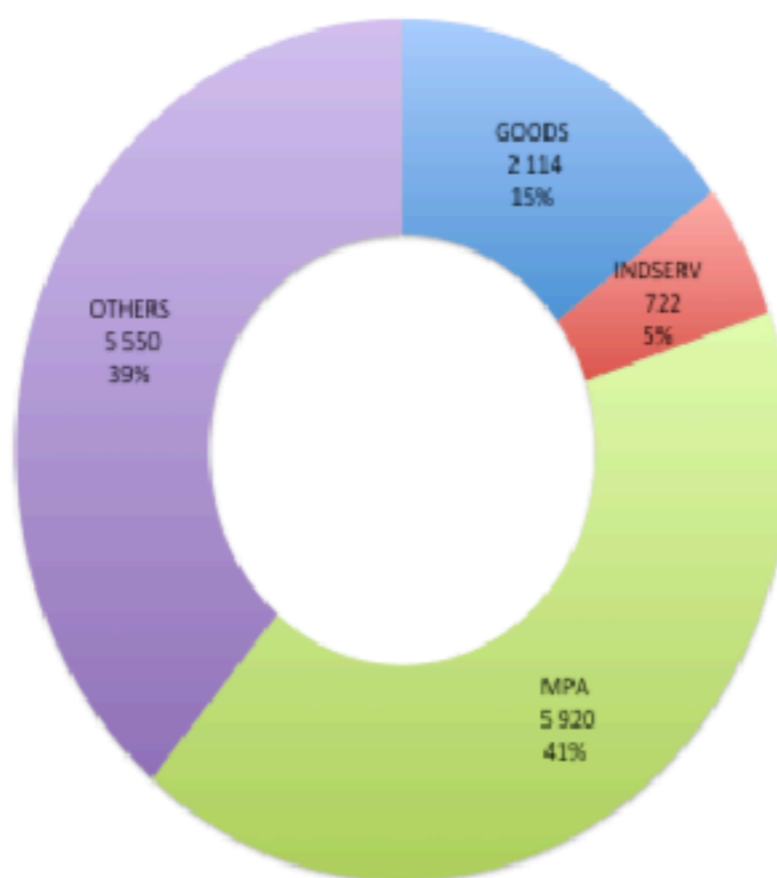
- ❖ Long list of experiments close to our physics
- ❖ experiment profit from the CERN infrastructure (conference rooms, computing, and sometimes (much) more)
- ❖ provide new input to our physics discussion

Number	Experiment	First Recognized	valid until
RE 1	AMS	1997	31-DEC-2019
RE 2b	Pamela	1999	31-DEC-2018
RE 3	Auger	1998	31-DEC-2018
RE 6	Antares	1999	31-DEC-2019
RE 7	Fermi (former GLAST)	2000	31-DEC-2018
RE 8	LISA-PF	2000	31-DEC-2018
RE 10	IceCube	2005	31-DEC-2018
RE 11	MICE	2005	31-DEC-2018
RE 12	MEG	2005	31-DEC-2018
RE 13	T2K	2006	31-DEC-2018
RE 14	Katrin	2007	31-DEC-2019
RE 17	Magic	2008	31-DEC-2017
RE 18	ArDM	2008	31-DEC-2017
RE 19	CREAM	2010	31-DEC-2018
RE 20	Belle II	2011	31-DEC-2019
RE 21	CBM	2011	31-DEC-2019
RE 22	Panda	2011	31-DEC-2019
RE 23	CTA-PP	2011	31-DEC-2017
RE 25	CALET	2012	31-DEC-2017
RE 26	Borexino	2012	31-DEC-2017
RE 27	NEXT	2013	31-DEC-2018
RE 28	Advanced Virgo	2013	31-DEC-2018
RE 29	DAMPE	2014	31-DEC-2019
RE 30	KM3NeT Phase 1	2014	31-DEC-2019
RE 31	Euclid	2015	31-DEC-2018
RE 33	LIGO	2016	31-DEC-2018
RE 34	JUNO	2017	31-DEC-2019
RE 35	SNO+	2017	31-DEC-2019

# EP Budget

## How do we spend our operation budget?

EP DEPARTMENT 2017 Operation budget  
payments by account  
CERN Funds in KCHF as 12/10/2017

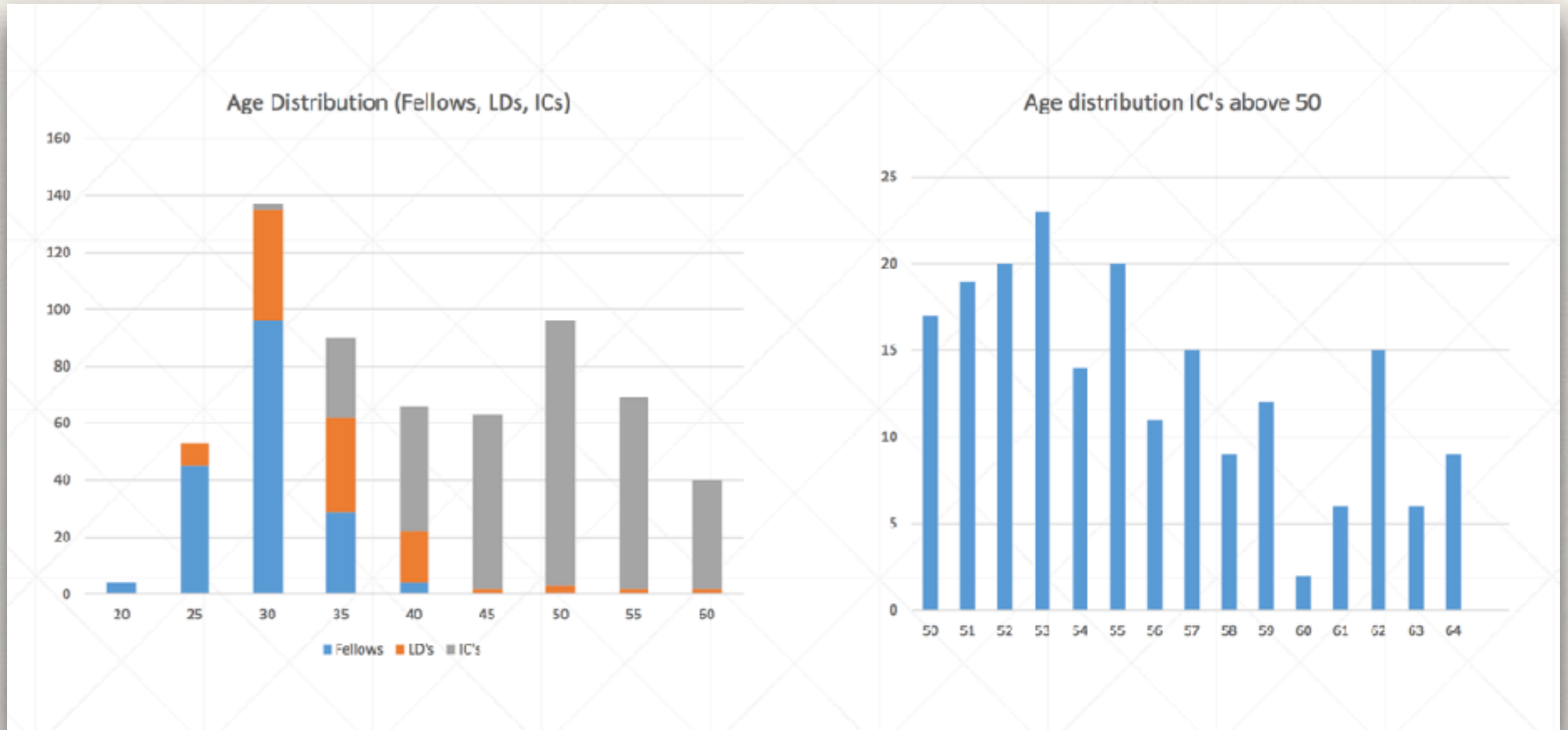


Row Labels	Total
CERN contributions to Collaborations	3 069
Mission	1 548
Rentals	396
Training	163
Cttees	111
Telephone and data communication charges	83
Consultancy and engineering	67
Shipping and transports	37
Editing, publishing, audiovisual services, books	36
Other overheads	39
<b>Grand Total</b>	<b>5 550</b>

EP CERN Operation budget  
As of 12/10/2017  
19.9 MCHF  
18 MCHF committed mid October  
14.3 MCHF paid

Row Labels	Total
Scientific associates	2 361
Users	827
Doctoral students	792
Technical students	660
Project associates	598
Trainees	395
Administrative students	92
Guest professors	71
Visiting scientist	68
Cooperation associates	55
<b>Grand Total</b>	<b>5 920</b>

# Age Profile



# Manpower in Teams and Groups

	2017	2018	2019	2020	2021	2022
<b>ATLAS</b>	76.5	75.2	75.5	68.7	66.6	58.0
<b>CMS</b>	77.5	78.3	78.2 +1	74.1 +2	65.6 +3	65.0 +4
<b>ALICE</b>	37.5	36.4	33.8 +1	32.8 +2	29.8 +3	28.0 +4
<b>LHCb</b>	38.5	39.8	39.0	37.6	34.4	33.0
<b>EP-DT</b>	82.3	81.6	78.3 +1	75.9 +2	70.1 +3	68.0 +4
<b>EP-ESE</b>	47.3	51.3	52.0 +1	51.0 +2	48.7 +3	48.0 +4
<b>EP-SFT</b>	21.9	23.3	24.0	22.3	21.4	21.0
<b>EP-LCD</b>	4.4	4.5	4.5	3.2	2.0	2.0
<b>EP-NU</b>	4.5	4.9	4.5	4.0	4.0	4.0
<b>EP-SME</b>	9.6	10.5	10.4	9.2	8.0	9.0
<b>EP-AGS</b>	30.3	31.1	30.3	30.5	30.3	33.0
<b>EP-DI</b>	6.2	11.5	24.7	40.2	63.6	24.0



# Fellow Quotas

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Group/Team	2018 Quota [m-m]	Get P [m-m]
ALICE	57	12
ATLAS	114	12
CMS	114	12
LHCb	57	12
LCD / related FCC	100	
SME (all other Exp.)	65	
SFT	34	12
ESE	34	12
DT	34	12
Nu-PL	12	
Reserve + other	100	12

# ATTRACT

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- ❖ Initiative using EU funding to promote early stage development of **next generation detection and imaging technologies**
  - ❖ first phase 2018 - 2020 (miniATTRACT) has been selected for funding by EC
    - ❖ Fostering co-innovations for future detection and imaging technologies (**software** is included)
    - ❖ 20 M€ to fund 180 proposals with 100 k€ each
    - ❖ General information session at CERN 30 October 2017 (4 page proposals)
  - ❖ Foreseen next phases (not approved yet):
    - ❖ second phase starting in 2020: best 6 or 7 projects from mini-ATTRACT to receive additional funding
    - ❖ third phase ATTRACT (Maxi) starting in 2021: part of FP9