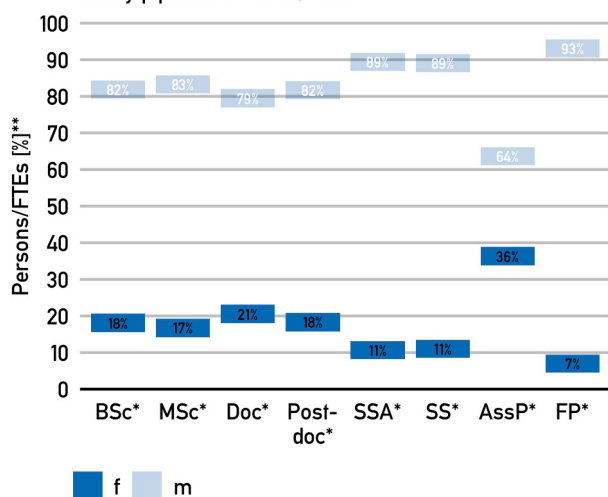


Gender Monitoring 2018/19

Departmental Report: Physics

Departmental reports serve as an addition to the general report «Gender Monitoring of ETH Zurich – Report on the Situation of Equal Opportunities for Women and Men in Studies and Science». They provide more detailed information on the situation of equal opportunities per area of expertise at ETH Zurich. All reports of the Gender Monitoring 2018/2019 are available under www.gender-monitoring.ethz.ch →. Information on sources and compilation of data as well as explanations of abbreviations can be found in the general report. In this departmental report, the situation of equal opportunities in the physics department (D-PHYS) of ETH Zurich is presented.

Leaky pipeline D-PHYS, 2018



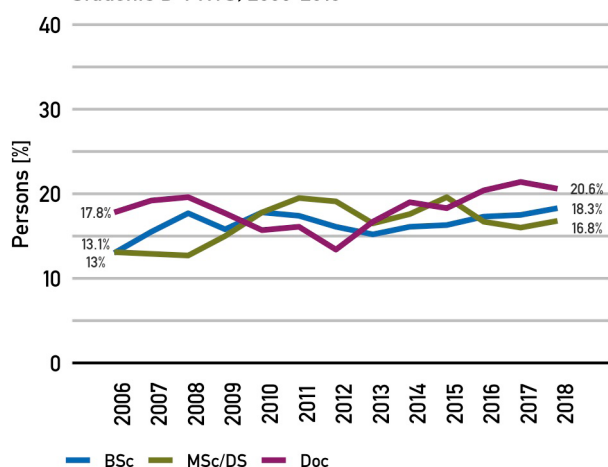
In 2018, the department of D-PHYS exhibits no typical course of a Leaky Pipeline. Instead, the graph shows an irregular progression, and women «drop away» from the postdoc level upward. However, the low proportion of women maintains steady by trend on all levels of the academic career. Hence, the chances for women to obtain an academic leading position are relatively good.

If the cohort effect is also accounted for in the graph, i.e. that today's female professors belong to a generation of students, among which women were represented much less than today, the discrepancy between the proportion of women among students and the proportion among professors would probably be even smaller.

*Note pertaining to functional levels: BSc: Bachelor's students; MSc: Master's students; Doc: doctoral students; Postdoc: postdoctoral students and research associates II; SSA: senior assistants and scientific assistants; SS: senior scientists and leading scientists (permanent contracts); Prof: assistant professors (AssP) and full professors (FP)

** starting from postdoctoral students the values represent FTEs (full-time equivalents), below they represent persons

Proportion of Women among Students and Doctoral Students D-PHYS, 2006-2018

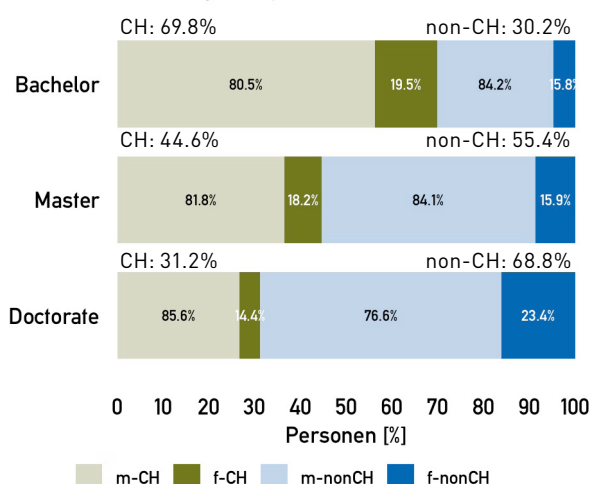


968 students were enlisted at the department of D-PHYS in 2018, thereof 171 women. The proportion of female students (BSc and MSc) reached 17.7% in 2018 and hence was 0.7 percentage points above the previous years value. In 2018, the proportion of women on the level of BSc and MSc studies was at 18.3% and 16.8% respectively.

The department of D-PHYS counted 292 doctoral students in 2018 and 60 women thereof. The proportion of women on the level of doctorate amounted to 20.6%. Hence, it was 0.8 percentage points below the previous years value and 2.8 percentage points above the value in 2006.

From BSc to MSc studies, the proportion of women decreased by 1.5 percentage points. However, from MSc to doctoral studies, the proportion increased by 3.8 percentage points.

Students and Doctoral Students against Gender and Foreign Entry Qualification D-PHYS, 2018



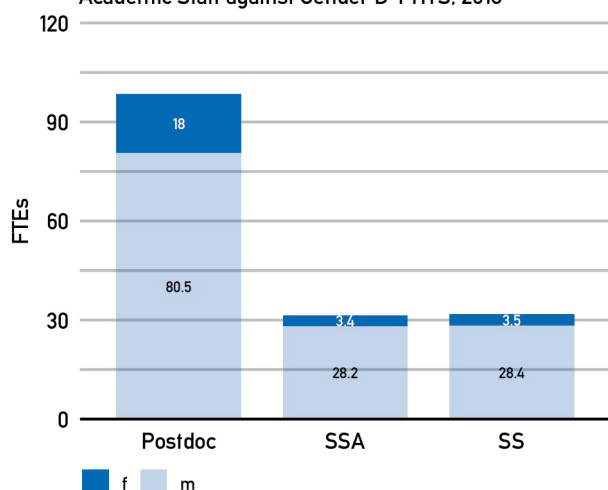
The degree of internationalisation* among students at the department of D-PHYS increased with each level of qualification from the level of BSc studies upward. On the levels of BSc and MSc studies, the degree of internationalisation was significantly above the ETH average. In 2018, the proportion of international students decreased on the level of MSc studies and increased on the level of BSc studies and doctorate compared to 2017: 30.2% on the level of BSc studies (plus 3.1 percentage points with respect to 2017), 55.4% on the level of MSc studies (minus 1.1 in comparison to 2017) and 68.8% on the level of doctorate (plus 1.5 compared with 2017).

The proportion of women among Swiss** doctoral students reached 14.4% in 2018 (minus 1.8 compared with 2017), whereas the proportion of international female students on the level of doctorate was higher at 23.4% (minus 0.5 compared to 2017).

*The degree of internationalisation is measured by the proportion of international students

** With Swiss entry qualification/students who acquired their entry qualification in Switzerland

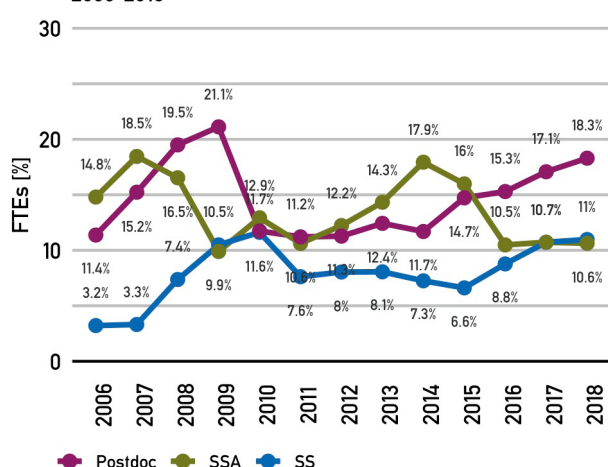
Academic Staff against Gender D-PHYS, 2018



Averaged over 2018, the department of D-PHYS occupied academic staff in the amount of 162.0 full-time equivalents. 24.9 full-time equivalents were filled by women.

The proportion of women, averaged over all career levels, amounted to 15.4% and hence was considerably below the ETH average of 27.2%. With respect to 2017, the value slightly increased by 0.6 percentage points.

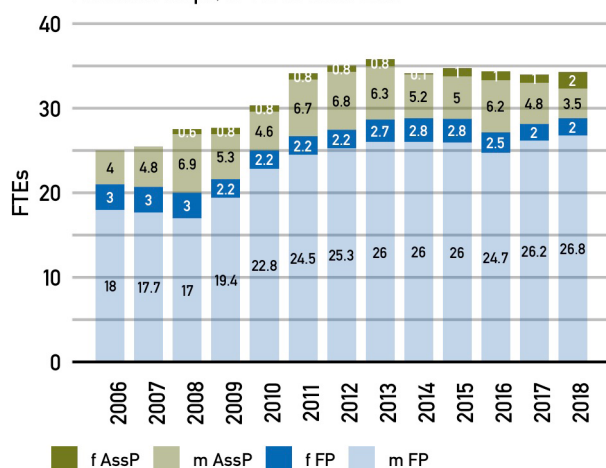
Proportion of Women among Academic Staff D-PHYS, 2006-2018



On the individual academic staff levels, the proportion of women at the department of D-PHYS reached the following in 2018:

- Postdoc/academic associates II: 18.3% (plus 1.2 percentage points with respect to 2017, plus 6.9 compared with 2006);
- Senior assistants/academic staff: 10.6% (minus 0.1 respective of 2017, minus 4.2 in comparison to 2006);
- Senior scientists: 11.0% (plus 0.3 with respect to 2017, plus 7.8 compared to 2006).

Full and Associate Professorships as well as Assistant Professorships, D-PHYS 2006-2018

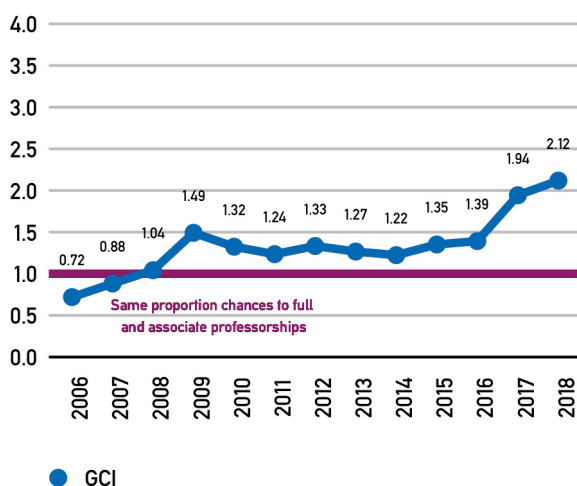


In comparison to the previous year, the number of full and associate professorships at the department of D-PHYS expressed in full-time equivalents increased by 0.6 to 28.8 in 2018. 2.0 full-time equivalents thereof were filled by women (unchanged compared to the previous year).

In 2018, assistant professors were occupied in the amount of 5.5 full-time equivalents at the department of D-PHYS (minus 0.3 full-time equivalents compared to the previous year). 2.0 full-time equivalents were held by female assistant professors.

The proportion of women among professorships reached 11.7% in 2018 and thus lay 2.9 percentage points above the previous year's value.

Glass Ceiling Index at D-PHYS, 2006-2018

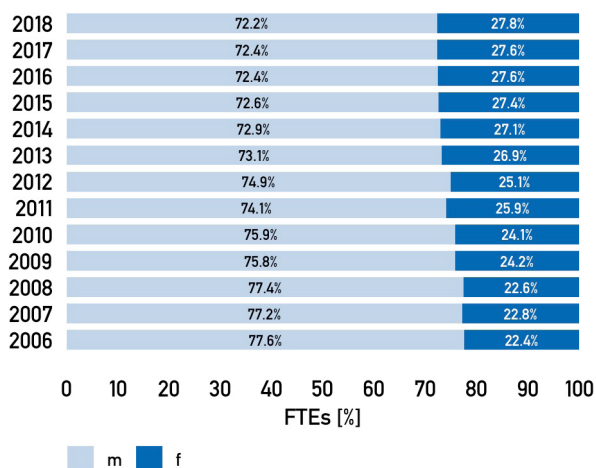


The Glass Ceiling Index (GCI) compares the proportion of women starting at the level of postdoctoral research up to the level of full professorship (full and associate professorships) to the proportion of women on the level of full professorship. A value greater than 1 indicates an underrepresentation of women on the level of full professorship in comparison to the academic positions starting at the level of postdoctoral research. The further the GCI value exceeds 1, the «thicker» the «glass ceiling» is.

In 2018, the department of D-PHYS measured a GCI value of 2.12, which indicates an underrepresentation of women on the level of full professor in comparison to the academic positions from the level of postdoctoral research upward. The GCI value for all of ETH Zurich at 1.85 was lower than the value of the D-PHYS.

Remark: A definition of the GCI can be found in the appendix of the general report. It corresponds to the definition in She Figures 2015 (https://ec.europa.eu/research/swafs/pdf/pub_gender_equality/she_figures_2015-final.pdf, p.137). The GCI can take on a value from 0 to infinite

Technical and administrative personnel, D-PHYS 2006-2018



In 2018, the department of D-PHYS employed technical and administrative personnel in the amount of 119.0 full-time equivalents. 33.0 full-time equivalents were filled by women. Accordingly, the proportion of women reached 27.8% (plus 0.2 percentage points compared to 2017). With respect to 2006, an increase by 5.4 percentage points was registered. Since 2006, the proportion of female technical and administrative personnel has increased by trend.

In 2018, the proportion of women among technical and administrative personnel at the D-PHYS department was markedly below the ETH average of 47.6%.

Leaky Pipeline D-PHYS 2018			BSc		MSc		Doc		Postdoc		SSA		SS		AssP		FP	
Proportion of Women in %			18.3		16.8		20.6		18.3		10.6		11.0		36.4		6.9	
Proportion of Men in %			81.7		83.2		79.4		81.7		89.4		89.0		63.6		93.1	
Students D-PHYS			2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018			
BSc																		
Proportion of Women in %			13.0	15.5	17.7	15.8	17.8	17.4	16.1	15.2	16.1	16.3	17.3	17.5	18.3			
Women in Headcount			43	56	72	64	81	87	81	79	83	84	97	104	100			
Men in Headcount			289	305	336	341	375	412	423	440	432	431	465	490	446			
MSc																		
Proportion of Women in %			13.1	12.9	12.7	15.0	17.8	19.5	19.1	16.5	17.6	19.6	16.7	16.0	16.8			
Women in Headcount			35	31	26	33	41	47	44	39	48	58	53	54	71			
Men in Headcount			232	209	179	187		194	187	197	225	238	265	284	351			
Doc																		
Proportion of Women in %			17.8	19.2	19.6	17.7	15.7	16.1	13.4	16.7	19.0	18.3	20.4	21.4	20.6			
Women in Headcount			35	39	43	42	38	41	35	46	54	52	59	61	60			
Men in Headcount			162	164	177	196	204	213	226	229	231	232	230	224	232			
Students and Doctoral Students by Gender and Foreign Entry Qualification D-PHYS 2018									BSc			MSc / DS			Doc			
Women CH in %									13.6			8.1			4.5			
Women non CH in %									4.8			8.8			16.1			
Men CH in %									56.2			36.5			26.7			
Men non CH in %									25.5			46.7			52.7			
Academic Staff D-PHYS			2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018			
Postdoc																		
Proportion of Women in %			11.4	15.2	19.5	21.1	11.7	11.2	11.3	12.4	11.7	14.7	15.3	17.1	18.3			
Women in FTE			6.8	9.7	13.4	15.3	9.4	10.3	11.0	13.4	12.5	15.8	16.3	18.5	18.0			
Men in FTE			53.0	53.9	55.2	57.2	70.7	81.6	86.6	94.3	94.4	91.7	90.2	89.9	80.5			
Senior or Scientific Assistants																		
Proportion of Women in %			14.8	18.5	16.5	9.9	12.9	10.6	12.2	14.3	17.9	16.0	10.5	10.7	10.6			
Women in FTE			3.7	5.1	5.4	3.3	5.1	4.9	6.3	7.0	7.8	6.1	3.7	3.6	3.4			
Men in FTE			21.1	22.7	27.2	29.7	34.6	41.5	45.0	41.9	35.9	32.1	31.3	29.6	28.2			
Senior Scientists																		
Proportion of Women in %			3.2	3.3	7.4	10.5	11.6	7.6	8.0	8.1	7.2	6.6	8.8	10.7	11.0			
Women in FTE			1.0	1.0	2.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.7	3.3	3.5			
Men in FTE			30.1	29.2	25.1	25.6	22.8	24.2	22.9	22.8	25.6	28.2	27.7	27.2	28.4			
Professorships D-PHYS			2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018			
Proportion of Women total in %			12.0	11.8	13.2	10.6	9.7	8.6	8.5	9.6	8.6	10.9	10.1	8.8	11.7			
Full Professors																		
Women in FTE			3.0	3.0	3.0	2.2	2.2	2.2	2.2	2.7	2.8	2.8	2.5	2.0	2.0			
Men in FTE			18.0	17.7	17.0	19.4	22.8	24.5	25.3	26.0	26.0	26.0	24.7	26.2	26.8			
Assistant Professors																		
Women in FTE			0.0	0.0	0.6	0.8	0.8	0.8	0.8	0.8	0.1	1.0	1.0	1.0	2.0			
Men in FTE			4.0	4.8	6.9	5.3	4.6	6.7	6.8	6.3	5.2	5.0	6.2	4.8	3.5			
Technical and Administrative Personnel D-PHYS			2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018			
Proportion of Women in %			22.4	22.8	22.6	24.2	24.1	25.9	25.1	26.9	27.1	27.4	27.6	27.6	27.8			
Women in FTE			26.1	25.8	25.3	28.4	28.4	30.4	29.8	31.0	31.6	31.2	32.6	33.5	33.0			
Men in FTE			90.5	87.1	87.0	88.8	89.1	86.8	88.7	84.5	85.3	82.7	85.5	87.6	86.0			