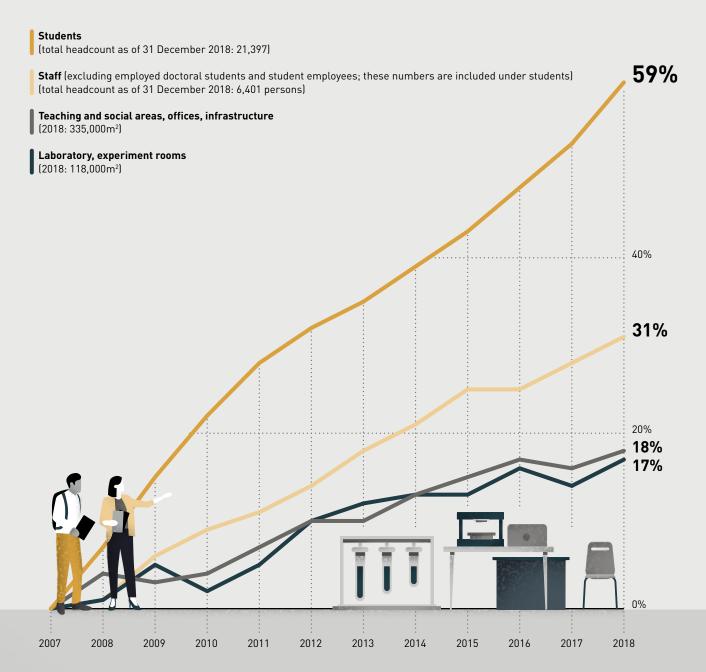
Trends in ETH staff and infrastructure

Since 2007, the number of ETH students and employees has been rising faster than the available room space. The university has mainly cushioned the growing demand for space by using available space more efficiently, as well as constructing new buildings and leasing extra room. Future development will be concentrated on the Hönggerberg campus, where the focus will be on the consolidation rather than the expansion of the existing infrastructure.



Infrastructure development (main usable area) excl. rooms being remodelled and spaces rented to third parties

Human resources and infrastructure

The number of employees at ETH Zurich continued to grow in 2018, and the university has introduced a series of measures to constantly improve working conditions for staff. One example is the annual ALEA Award, which emphasises the importance of leadership skills for the university's success. The award honours leaders who encourage modern and innovative working conditions and who help staff strike a balance between their work, family life and other commitments. Every year between 40 and 50 people are nominated, most of them professors. In 2018, Professor Laura Nyström received the ALEA Award for her exemplary leadership.

As staff numbers grow, ETH Zurich continues to expand its infrastructure. In 2018, new development was concentrated in Basel and on the Hönggerberg campus. The foundation stone for the new building in Basel was laid in September. As of 2022, all research groups at the Department of Biosystems Science and Engineering will be brought together under one roof on the Schällemätteli campus, close to important partners. The Hönggerberg campus is to be consolidated according to the Master Plan 2040 that ETH has drawn up in cooperation with the city and canton of Zurich. The focus will be on consolidation before expansion, and creating an attractive space with a city neighbourhood feel.

Staff by function

ETH Zurich (consolidated)		FTEs on reporting date					
Full-time equivalents (FTEs), at the end of 2018 (reporting date) or annual average	2017 Total	2018 Total	Women	Inter- national staff	Increase		at y/e
					Absolute	in %	2018 Total
Total staff ¹	9,281.1	9,527.9	32.9%	56.4%	246.8	2.7%	9,789.0
of which permanent members of staff	2,955.1	3,032.9	30.0%	30.0%	77.8	2.6%	3,048.6
Professors ²	490.8	495.7	15.0%	67.1%	4.9	1.0%	492.2
Full professors	401.1	404.4	13.4%	64.6%	3.3	0.8%	402.3
Assistant professors	89.7	91.4	21.9%	78.5%	1.6	1.8%	89.9
Scientific staff	5,964.1	6,093.5	30.3%	71.2%	129.4	2.2%	6,290.1
Permanent scientific staff	257.5	259.0	15.1%	44.2%	1.5	0.6%	261.2
Temporary scientific staff	5,321.0	5,416.1	30.6%	75.3%	95.1	1.8%	5,523.9
Senior assistants, scientific staff (temporary)	616.0	617.1	25.6%	72.5%	1.1	0.2%	639.2
Postdoctoral students, scientific research assistants II	1,107.0	1,108.3	30.9%	89.8%	1.3	0.1%	1,122.3
Scientific research assistants I	3,598.0	3,690.7	31.3%	71.4%	92.7	2.6%	3,762.4
Teaching/research assistants	385.6	418.4	35.7%	35.0%	32.7	8.5%	505.0
Technical and administrative staff	2,658.4	2,766.9	42.4%	24.8%	108.5	4.1%	2,833.7
of which permanent members of staff	2,298.4	2,371.9	42.1%	22.5%	73.4	3.2%	2,387.2
Technical and IT staff	1,427.5	1,484.5	19.3%	30.0%	57.0	4.0%	1,520.1
Administrative staff	1,230.9	1,282.4	69.0%	18.9%	51.5	4.2%	1,313.6
Apprentices	167.8	171.8	28.4%	6.2%	3.9	2.3%	173.0

¹ Including 130.2 FTEs at ETH Singapore SEC Ltd. (SEC) on average in 2018, on the reporting date 135.8 FTEs; all are allocated fully to the Scientific research assistants I.

www.ethz.ch/staff-stats

STAFF PARTY

Community atmosphere at the togETHer18 staff party on Hönggerberg campus



Every two years the ETH community celebrates at the togETHer staff party.

The setting of the togETHer18 staff party was designed as an outsized home for the ETH community, with a mock living room, hobby space and kids' room. Around 3,500 staff and their guests braved the rain and unusually cold weather on the last day of August to soak up the communal atmosphere of the shared space on the Hönggerberg campus. Food, drink and entertainment were laid on at the party, which went on till midnight. The programme included the ceremony for the ALEA Award for exemplary leadership (see page 58), a set from Paul das Pausenbrot – a cover band playing the best party songs from the last 50 years and the Zurich DJ Rolf Imhof. Anyone who likes to sing also had a chance to make their voice heard in the karaoke bar.

www.ethz.ch/together-en

² Headcount 2018: 528 (incl. professors with appointments at other institutions).

Staff by area

Total staff	FTEs annual average						
Full-time equivalents (FTEs), at the end of 2018 (reporting date) or annual average ¹	2017 Total	2018 Total	Women	Inter- national staff	Increase		reporting date at y/e
					Absolute	in %	2018 Total
ETH Zurich (consolidated)	9,281.1	9,527.9	32.9%	56.4%	246.8	2.7%	9,789.0
Departmental total	7,575.4	7,699.4	31.9%	62.8%	124.0	1.6%	7,901.3
Architecture and Civil Engineering	971.9	980.4	34.1%	56.6%	8.5	0.9%	1,002.4
Architecture	406.0	409.8	40.2%	55.3%	3.8	0.9%	404.6
Civil, Environmental and Geomatic Engineering	565.9	570.6	29.7%	57.6%	4.7	0.8%	597.8
Engineering Sciences	2,245.5	2,282.7	21.6%	67.6%	37.2	1.7%	2,343.0
Mechanical and Process Engineering	731.5	711.3	18.6%	62.1%	-20.2	-2.8%	719.6
Information Technology and Electrical Engineering	579.9	584.1	19.1%	67.4%	4.2	0.7%	587.7
Computer Science	404.8	446.0	18.8%	68.9%	41.2	10.2%	483.9
Materials	230.7	235.4	26.4%	65.9%	4.7	2.0%	235.6
Biosystems Science and Engineering	298.6	305.9	33.9%	80.1%	7.3	2.5%	316.2
Natural Sciences and Mathematics	2,325.8	2,323.2	31.3%	62.6%	-2.6	- 0.1%	2,378.7
Mathematics	283.3	287.8	23.8%	62.7%	4.5	1.6%	315.3
Physics	627.8	629.2	18.9%	57.3%	1.3	0.2%	630.7
Chemistry and Applied Biosciences	800.9	802.5	31.9%	63.4%	1.6	0.2%	823.9
Biology	613.8	603.7	47.1%	67.0%	- 10.1	-1.6%	608.9
System-oriented Natural Sciences	1,425.3	1,486.9	44.2%	59.8%	61.6	4.3%	1,546.3
Earth Sciences	335.9	323.9	33.4%	68.3%	- 12.0	-3.6%	337.2
Environmental Systems Science	624.0	646.4	44.7%	57.3%	22.4	3.6%	664.4
Health Sciences and Technology	465.5	516.6	50.4%	57.5%	51.1	11.0%	544.6
Management and Social Sciences	606.8	626.2	38.8%	62.6%	19.4	3.2%	630.9
Management, Technology, and Economics	325.9	338.2	39.5%	66.2%	12.4	3.8%	346.9
Humanities, Social and Political Sciences	281.0	288.0	38.0%	58.3%	7.0	2.5%	284.1
Teaching and research facilities outside the academic departments, others ²	436.6	509.4	33.6%	61.5%	72.7	16.7%	535.9
Executive Board, staff units and administrative departments	1,269.1	1,319.1	38.8%	17.1%	50.0	3.9%	1,351.8
Executive Board and staff units	116.2	132.3	61.1%	23.0%	16.1	13.9%	137.1
Administrative departments	1,152.9	1,186.8	36.3%	16.4%	33.9	2.9%	1,214.7
Corporate Communications	27.5	27.6	51.0%	22.1%	0.1	0.3%	26.4
Academic Services	58.3	60.5	63.6%	13.8%	2.3	3.9%	61.8
Educational Development and Technology	27.4	31.9	40.8%	24.9%	4.4	16.2%	33.8
Student Services	15.9	15.6	79.5%	3.8%	-0.3	-2.0%	16.2
Controlling	19.9	20.9	50.3%	4.8%	1.0	5.2%	22.0
Financial Services	17.4	18.0	30.2%	13.9%	0.5	3.1%	18.6
Accounting	39.6	41.4	39.9%	16.3%	1.8	4.5%	44.4
Facility Management	191.1	189.4	18.8%	20.5%	- 1.7	- 0.9%	192.6
ETH Library	219.6	218.1	59.5%	15.5%	- 1.5	- 0.7%	222.9
Real Estate	68.8	72.8	28.5%	15.6%	4.0	5.8%	74.5
IT Services	266.1	278.7	11.7%	18.5%	12.5	4.7%	283.2
Human Resources	65.7	71.7	68.4%	10.8%	6.1	9.2%	74.2
Services	94.4	98.1	41.9%	11.2%	3.7	3.9%	102.3
Safety, Security, Health and Environment	40.0	41.2	27.9%	17.3%	1.2	3.0%	41.3

¹ The average number of employees at the end of both the reporting year and the previous year is also based on the current organisational structure of ETH Zurich as at 31 December 2018. Since 2017, both the headcount and the calculation are reported on a consolidated basis; the figures shown in the table for the reporting year 2017 therefore include the staff at ETH Singapore SEC Ltd.

² "Teaching and research facilities outside the academic departments, others" refers to the Singapore-ETH Centre (SEC), Institute of Science, Technology, and Policy (ISTP), Collegium Helveticum, Congressi Stefano Franscini, ETH Institute for Theoretical Studies (ITS), Wyss Translational Center Zurich (Wyss Zurich), Functional Genomic Center Zurich, NEXUS Personalized Health Technologies, FIRST Lab, B&R Nanotechnology Center, ScopeM, ETH Phenomics Center, Swiss Seismological Service (SED), CSCS, AgroVet-Strickhof, Swiss Data Science Centre (SDSC) and other central projects. The headcount of the fully consolidated unit ETH Singapore SEC Ltd. is also included (135.8 FTEs as at 31 December 2018 and 130.2 FTEs on average in 2018).



Laura Nyström, winner of the ALEA Award.

ALEA AWARD

Laura Nyström honoured

At the togETHer18 staff party, Professor Laura Nyström was presented with the ALEA Award as ETH Zurich's most exemplary leader. The professor, who works at the Institute of Food, Nutrition and Health, is one of 46 managers nominated as best leader by their employees this year. "A friendly, respectful atmosphere characterised by responsibility and trust was one of the aspects that her research group particularly appreciates," said Linda Wehner, representative of the scientific staff association AVETH, before presenting the award to Nyström. Her staff also value her extraordinary support in promoting a good work/life balance and helping employees with their career progression.

The award aims to emphasise the huge importance of leadership skills for the success of ETH and promote a suitable leadership culture. The prize is awarded annually by AVETH with support from the Equal! Office of Equal Opportunities and the HR department.

www.ethz.ch/alea-award



HUMAN RESOURCES

New career profile for senior scientists

ETH Zurich employs around 300 senior scientists on permanent contracts. "Senior scientists are crucial for the quality of our research and teaching, and always will be," says Lukas Vonesch, Head of Human Resources. Past experience showed, however, that some clarification was required concerning the job profile, expectations and professional development of senior scientists. The academic departments and university groups therefore embarked upon a consultation process on various measures for strengthening this group of employees, with a view to implementing a transparent career concept. Four role profiles were introduced at the beginning of 2019, each with a different focus: research, teaching, technology, and research coordination. Compulsory teaching and research components are also defined for each of the four role profiles. "ETH wants to support its senior scientists in their continuing professional development," Vonesch comments. Every two years a career consultation will be arranged to discuss the employee's long-term development opportunities.

www.ethz.ch/working

BIOSYSTEMS SCIENCE AND ENGINEERING

A new home for D-BSSE in Basel

In September 2018, ETH laid the foundation stone for its new department building on the Schällemätteli campus in Basel. As of 2022, all the research groups at the Department of Biosystems Science and Engineering will be united under one roof.

Researchers in the Department of Biosystems Science and Engineering (D-BSSE) in Basel develop mathematical models to gain a better understanding of epidemics. They also search through large data sets for correlations between genetic characteristics and the occurrence of complex diseases, and test pharmaceutical agents in cell tissues on electronic chips. Their goal is to advance synthetic biology and personalised and data science-based medicine through interdisciplinary cooperation. D-BSSE engineers, experimental biologists and bioinformatics specialists will all be accommodated in the new building on the Schällemätteli campus from 2022 onwards. ETH Zurich is investing some 200 million Swiss francs in the new building.

"Medicine and life science are among ETH Zurich's strategic priorities," said then ETH President Lino Guzzella at the laying of the foundation stone in September. "Our department in Basel gives us access to a research network that is a world pioneer in this area." The new building in the immediate vicinity of the University of Basel, the University Hospital Basel and

the University Children's Hospital Basel will give D-BSSE a new home while promoting interaction with industry and medical research. "We greatly value the current collaboration with our local partners and hope that the physical proximity will mean we can benefit even more from each other's expertise," commented Timm Schroeder, Head of D-BSSE

On the new campus, ETH Zurich and the University of Basel will also cooperate more closely at the infrastructure level, resulting in further synergies. The scientific facilities housed in the new ETH building will be available to University of Basel members, while ETH researchers will in turn benefit from sharing the university's laboratory animal units. The ETH building will be supplied with heating, cooling and hot water from nearby University of Basel buildings. The Genomics Facility Basel, which is already co-managed with the University of Basel, will continue as a joint venture at the new site; here researchers will have state-of-the-art equipment for genome sequencing and data analysis at their disposal.

www.ethz.ch/laying-of-the-foundation-basel

IT SERVICES

New IT platform for confidential data

Researchers at ETH Zurich now have access to a new infrastructure for big data analytics. Leonhard Open is designed for open (public) research data, while Leonhard Med is intended for particularly sensitive data where confidentiality is paramount.

The new IT platform Leonhard comprises two computing clusters. Both are optimised for analysing large quantities of data, and also for machine learning. The Scientific IT Services section of ITS headed by Bernd Rinn started operating Leonhard in January 2018.

Leonhard Open is available to ETH members who work with open, non-sensitive research data, while Leonhard Med is a secure system intended for confidential data used in areas such as personalised medicine. Two initiatives – the Swiss Personalized Health Network and Personalized Health and Related Technologies – will accelerate the growth of ETH's biomedical research community. "The challenge wasn't just to develop a system that provides top performance while also being extremely secure. It also had to be flexible and easy to use," Rinn says.

The two computing clusters have separate logical storage systems, log-in nodes and network connections. This separation, combined with integrated encryption, assures a high level of protection for confidential data.

Leonhard is funded by ETH Zurich and users themselves. The system is reserved exclusively for use by shareholders. This differentiates the platform from the highperformance cluster Euler, which anyone with ETH access can use. "Euler and Leonhard complement each other," says Rinn. While Euler targets a broader research community, Leonhard is optimised specifically for data-intensive work with a high security level.

www.ethz.ch/it-in-research https://scicomp.ethz.ch/wiki/Leonhard

ETH LIBRARY

New platform for libraries

The Swiss Library Service Platform (SLSP). a non-commercial corporation in which ETH Zurich is an investor, will replace the existing associations of Swiss university libraries. By the end of 2020, all catalogue data and the basic services of the science libraries will be integrated into the new platform. The SLSP will take over technical operation with a common library system, and also offer services that the current university library associations provide locally and to an extent redundantly. This includes the NEBIS network, which the ETH Library has been operating successfully for over 30 years for more than 140 member libraries. "It's time to think on a grander scale," says Andreas Kirstein from the ETH Library. "We want to expand the successful collaboration with science libraries to include all the university libraries." This would create synergies for all Swiss university libraries and increase standardised services for customers.

http://www.library.ethz.ch/en/ https://blogs.ethz.ch/slsp/ (in German only)

Cooperation between libraries saves resources.

A DENSER INFRASTRUCTURE

Vision for Hönggerberg campus in 2040

ETH Zurich is planning to expand its infrastructure and facilities within the current campus boundaries. The vision set out for 2040 is an attractive campus with a city neighbourhood feel that serves as a base for teaching, research and the transfer of knowledge, while leaving ample space for social and leisure activities.

To make sure ETH can continue to develop this important space, the municipal council of the city of Zurich will transfer the Master Plan 2040 into updated special building regulations and adapt the municipal building and zoning regulations. Following an amendment to the cantonal structure plan entry, ETH will once again have room for expansion.

This vision is based on the ETH Campus Hönggerberg 2040 Master Plan drawn up by ETH Zurich together with the city and canton of Zurich. This envisages a consolidation of buildings within existing boundaries, so as to preserve the surrounding landscape and green spaces.

Four new strategically placed high-rise buildings will shape the character of the campus. The central Wolfgang-Pauli-Strasse will be transformed into a lively boulevard with cafés, shops and exhibition space on the ground floor. Shops and public squares will complete the picture, making the campus an attractive area for ETH members and visitors.

"A key component of this infill development is the positioning of the new highrise buildings on the central boulevard," explains Ulrich Weidmann, ETH Vice President for Human Resources and Infrastructure. "That will allow us to expand the green spaces on the campus and preserve the protected research buildings and existing gardens."

www.ethz.ch/masterplan-2040

Artist's impression of the extended Flora-Ruchat-Roncati Garden for Campus Hönggerberg 2040.



New professorships

FULL PROFESSORS

New appointments



Professor Tom Avermaete, History and Theory of Urban Design (1.9.2018), D-ARCH, formerly Full Professor at Delft University of Technology, Netherlands



Professor Alexander Stremitzer, Law, Economics, and Business (1.5.2018), D-GESS, formerly Professor at the University of California, Los Angeles, USA



Professor François Charbonnet, Architecture and Design (1.6.2018), D-ARCH, formerly Partner and Architect at "Made in", Geneva, Switzerland



Professor Zhendong Su, Computer Science (1.8.2018), D-INFK, formerly Professor at the University of California, Davis, USA



Professor Emanuel Christ, Architecture and Design (1.4.2018), D-ARCH, formerly Partner and Architect at Christ & Gantenbein AG, Basel, and guest lecturer at Harvard University, Cambridge, USA



Professor Jacob Corn, Genome Biology (1.10.2018), D-BIOL, formerly Scientific Director at the Innovative Genomics Institute (IGI), Berkeley, and Adjunct Assistant Professor at the University of California, Berkeley, USA



Professor Christoph Gantenbein, Architecture and Design (1.4.2018), D-ARCH, formerly Partner and Architect at Christ & Gantenbein AG, Basel, and quest lecturer at Harvard University, Cambridge, USA



Professor Patrick Heiz, Architecture and Design (1.6.2018), D-ARCH, formerly Partner and Architect at "Made in", Geneva, Switzerland



Professor Daniel Razansky, Biomedical Imaging (1.8.2018), D-ITET, formerly Professor of Molecular Imaging Engineering at the Technical University of Munich, Germany

Promotions



Professor Philippe Block, Architecture and Structure (1.1.2018), D-ARCH, formerly Associate Professor at ETH Zurich, Switzerland



Professor Olga Sorkine Hornung, Computer Science (1.1.2018), D-INFK, formerly Associate Professor at ETH Zurich, Switzerland



Professor Laurent Stalder, Theory of Architecture (1.6.2018), D-ARCH, formerly Associate Professor at ETH Zurich, Switzerland



Professor André Studart, Complex Materials (1.10.2018), D-MATL, formerly Associate Professor at ETH Zurich, Switzerland

ASSOCIATE PROFESSORS



Professor Whitney Behr, Structural Geology and Tectonics (1.7.2018), D-ERDW, formerly Assistant Professor at the University of Texas at Austin, USA

New appointments



Professor Andreas Fichtner, Seismology and Wave Physics (1.1.2018), D-ERDW, formerly Assistant Professor (tenure track) at ETH Zurich, Switzerland



Professor Otmar Hilliges, Computer Science (1.6.0218), D-INFK, formerly Assistant Professor (tenure track) at ETH Zurich, Switzerland



Professor Dirk Mohr, Computational Modelling of Materials in Manufacturing (1.1.2018), D-MAVT, formerly Assistant Professor (tenure track) at ETH Zurich, Switzerland



Professor Bill Morandi, Synthetic Organic Chemistry (1.7.2018), D-CHAB, formerly group leader at the Max Planck Institute for Coal Research, Mülheim, Germany



Professor Elli Mosayebi, Architecture and Design (1.8.2018), D-ARCH, formerly Professor at the Technical University of Darmstadt, Germany



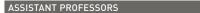
Professor Sai Reddy, Systems and Synthetic Immunology (1.8.2018), D-BSSE, formerly Assistant Professor (tenure track) at ETH Zurich, Switzerland



Professor Milica Topalovic, Architecture and Territorial Planning (1.8.2018), D-ARCH, formerly Assistant Professor (tenure track) at ETH Zurich, Switzerland



Professor Lenny Winkel, Inorganic Environmental Geochemistry (1.4.2018), D-USYS, formerly Assistant Professor at ETH Zurich and a group leader at Eawag, Switzerland







Professor Elliott Ash, Law, Economics, and Data Science (1.7.2018), D-GESS, formerly Assistant Professor (tenure track) at the University of Warwick, Coventry, UK



Professor Ori Bar-Nur, Regenerative and Movement Biology (1.2.2018), D-HEST, formerly postdoctoral researcher at Harvard Medical School, Boston, Massachusetts, USA



Professor Andrea Burden, Pharmacoepidemiology (1.5.0218), D-CHAB, formerly postdoctoral researcher at the University of Maastricht, Netherlands



Professor Cyril Chelle-Michou, Mineral Resource Systems (1.12.2018), D-ERDW, formerly postdoctoral researcher at the University of Bristol, United Kingdom



Professor Olga Fink, Intelligent Maintenance Systems (1.10.2018), D-BAUG, formerly group leader at Zurich University of Applied Sciences, Winterthur, Switzerland



Professor Daniel Hall, Innovative and Industrial Construction (1.1.2018), D-BAUG, formerly doctoral student at Stanford University, California, USA



Professor Taekwang Jang, Analogue and Mixed Signal Interfaces (1.8.2018), D-ITET, formerly postdoctoral researcher at the University of Michigan, USA

ADJUNCT PROFESSORS



Professor Victor Mougel, Inorganic Chemistry (1.12.2018), D-CHAB, formerly scientist at the Collège de France, Paris, France



Professor Rafael Polania, Decision Neuroscience (1.2.2018), D-HEST, formerly postdoctoral researcher at the University of Zurich, Switzerland



Professor Stanisa Raspopovic, Neuroengineering (1.4.2018), D-HEST, formerly Chief Technology Officer at the EPFL spin-off SensArs Neuroprosthetics, Switzerland



Professor Lesya Shchutska, Experimental Particle Physics (1.1.2018), D-PHYS, formerly research associate at ETH Zurich, Switzerland



Professor Emma Wetter Slack, Food Immunology (1.6.2018), D-HEST, formerly senior scientist at ETH Zurich, Switzerland

Professor Arthur Gessler,

D-USYS, lecturer at ETH Zurich, Switzerland

Professor Markus Künzler,

D-BIOL, senior scientist at ETH Zurich, Switzerland

Professor Michael Leunig,

D-HEST, lecturer at ETH Zurich, Switzerland

Professor Katharina Maniura,

D-HEST, lecturer at ETH Zurich, Switzerland

Professor Kai Udert,

D-BAUG, lecturer at ETH Zurich, Switzerland

Professor Martin Wörter,

D-MTEC, senior scientist and Privatdozent at ETH Zurich, Switzerland

Professor Nicola Zamboni,

D-BIOL, senior scientist at ETH Zurich, Switzerland

For department name abbreviations, visit www.ethz.ch/departments