Meeting of the ETH Board on 26/27 September 2018 13 new professors appointed at ETH Zurich and EPFL

Bern, 27 September 2018 – At its meeting of 26/27 September 2018 and upon application of the President of ETH Zurich, Professor Lino Guzzella, and the President of EPFL, Professor Martin Vetterli, the ETH Board appointed a total of 13 professors. It also took note of the resignations of eight professors and thanked them for their services.

Appointments at ETH Zurich

Dr Cyril Chelle-Michou (*1985), currently a post-doctoral student at the University of Bristol, United Kingdom, as Tenure Track Assistant Professor of Mineral Resource Systems. Cyril Chelle-Michou studies natural resources, utilising the disciplines of geology, geochronology, magmatic petrology, geochemistry and tectonics. He brings together data and concepts from a wide range of fields in order to decode the processes that formed our planet and created the natural resources used in many areas of society. With the appointment of Cyril Chelle-Michou, the Department of Earth Sciences is filling an important niche in a field which is becoming increasingly important, given the global demand for resources.

Dr Yiwen Chu (*1986), currently a post-doctoral student at Yale University, New Haven, USA, as Tenure Track Assistant Professor of Hybrid Quantum Systems. Yiwen Chu's research focuses on exploring new materials, designs and geometries for developing superconducting qubits and cavities. Her experiments have demonstrated the entanglement of individual electron spins with photons in a solid state system based on nitrogen vacancy centres in diamond. She has also gained international recognition for developing a new system of coupling superconducting qubits to mechanical resonators. Yiwen Chu's research is an excellent fit with the "Quantum Science and Technology" research group at ETH Zurich.

Professor Gonzalo Guillén Gosálbez (*1978), currently Reader at Imperial College London, United Kingdom, as Associate Professor of Chemical Systems Engineering. Gonzalo Guillén Gosálbez' research is conducted at the interface of chemical engineering, operations research and environmental technology. With due regard to the life cycle assessment, he develops computer-assisted decision-making tools for evaluating and optimising sustainable practices, primarily in the chemical industry. Gonzalo Guillén Gosálbez uses a mathematical approach to help close the gap between the natural and engineering sciences, creating important synergies with other departments of ETH Zurich and with industry.

Dr Victor Mougel (*1985), currently a scientist at the Collège de France, Paris, as Tenure Track Assistant Professor of Inorganic Chemistry. Victor Mougel focuses on the study of bioinspired molecular processes with the aim of transforming easily renewable resources such as carbon dioxide and nitrogen into useful synthetic building blocks and fuels. By appointing Victor Mougel, ETH Zurich is gaining a renowned expert who works at the interface of catalysis, inorganic molecular chemistry and materials science. He will also make a valuable contribution to teaching, thanks to his considerable experience of educating students at Bachelor's, Master's and PhD level.

Professor Kenneth Paterson (*1969), currently Full Professor at Royal Holloway College, London, United Kingdom, as Full Professor of Computer Science. Kenneth Paterson's research is in the field of applied cryptography. His interests and main contributions lie in the analysis of cryptographic Internet protocols. His work demonstrated serious weaknesses in a number of core Internet protocols, leading to changes being made to several standards. The appointment of Kenneth Paterson enables the Department of Computer Science to strengthen its courses in the area of information security. At the same time, research projects undertaken in partnership with industry will receive a boost.

Professor André R. Studart (*1974), currently Associate Professor at ETH Zurich, as Full Professor of Complex Materials. André Studart is a successful researcher in several areas of materials science. His

work on bioinspired composites and microcapsules formed of particle-filled colloidosomes has attracted attention from the wider public as well as the scientific community. He has succeeded in optimising the mechanical properties of composites by controlling the orientation of reinforcing ceramic platelets. André Studart is a great asset to the Department of Materials at ETH Zurich. His innovative ideas and commitment strengthen not only the department's teaching but also its collaboration with specialist colleagues and with industry.

Alexandre Theriot (*1972), currently an architect at BRUTHER, Paris and Lausanne, and a lecturer at several schools of architecture throughout the world, as Associate Professor of Architecture and Design. Alexandre Theriot is active in the fields of architecture, research, education, urban design and landscape at the BRUTHER architecture firm which he founded in 2007 with Stéphanie Bru. The partners have attracted considerable attention internationally for their projects. Last year the architecture firm won the prestigious international competition for the Life Sciences building at EPFL. The appointment of Alexandre Theriot expands and ideally complements the teaching staff at ETH Zurich's Department of Architecture.

Dr Ferdinand von Meyenn (*1981), currently a Group Leader at King's College London, United Kingdom, as Tenure Track Assistant Professor of Nutrition and Metabolic Epigenetics. Ferdinand von Meyenn's current research focuses on the interface between epigenetics, metabolism and nutrition. Its central aims are to clarify the processes which contribute to changes in the epigenetic pattern over time, and to develop new methods of analysing these processes. With the appointment of Ferdinand von Meyenn, who received an ERC Starting Grant in 2018, ETH Zurich is ideally strengthening the research area of food, nutrition and health, and expanding its expertise in the field of epigenetics.

Fan Yang (*1988), currently a post-doctoral student at ETH Zurich, as Tenure Track Assistant Professor of Computer Science. Fan Yang's research into data analysis and statistics ranges from theoretical studies and statistical methods through to practical applications in life sciences. In her thesis, she investigated complex statistical models with latent variables, making new discoveries about the convergence of the Expectation Maximisation algorithm. Her work has narrowed the gap between conservative mathematical barriers and the practical effectiveness of this method in data analysis. In the data sciences there is an important link between informatics, electrical engineering and statistics, which Fan Yang will help strengthen.

Appointments at EPFL

Dr Juhan Aru (*1986), currently a post-doctoral student at ETH Zurich, as Tenure Track Assistant Professor of Mathematics. Juhan Aru is one of the world's most promising scientists of his generation in the field of probability theory. He also has the potential to develop the seminal field of stochastic analysis at EPFL. In his research, he concentrates in particular on Gaussian free fields and the Schramm-Loewner evolution, a single-parameter family of random planar curves. Juhan Aru also has excellent teaching abilities. His research and teaching will enhance the EPFL's reputation in key subject areas.

Professor Matthias Lütolf (*1973), currently Associate Professor at EPFL, as Full Professor of Life Sciences. Matthias Lütolf is a globally recognised expert on biomaterials and stem cell research. He is particularly interested in controlling the differentiation of these cells – a crucial precondition for tissue regeneration and cell therapy. His research combines biological knowledge with engineering techniques in a way that has enabled him to make notable steps forward. He has, for example, succeeded in creating *in vitro* cell groups of unprecedented complexity which resemble the cell organisation of a natural organ. Matthias Lütolf's promotion to a full professorship will strengthen EPFL's international reputation in a vital growth area.

Professor Kevin Sivula (*1979), currently Tenure Track Assistant Professor at EPFL, as Associate Professor of Chemical Process Engineering. Kevin Sivula's research focuses on the development of

engineering methods based on chemical solution-based processes in order to manufacture semiconductor materials for optoelectronic high-performance systems. His particular aim is to develop new technologies for the manufacturing of more stable, more efficient and more cost-efficient semiconductor materials for the fabrication of photovoltaic devices. Kevin Sivula, who received an ERC Starting Grant in 2013, is a very active researcher who will help boost the international standing of EPFL, especially in the field of sustainable development.

Professor Ola Svensson (*1981), currently Tenure Track Assistant Professor at EPFL, as Associate Professor of Computer Science. Ola Svensson works on solving fundamental theoretical problems in the computer sciences. He is considered to be a rising star, and has developed into one of the intellectual leaders in his subject over the past few years. His work was awarded an ERC Starting Grant in 2014, among other accolades. Specifically, he works on algorithms with the potential to remove blocks caused by mathematical problems previously regarded as insoluble, thus making efficiency improvements possible. Ola Svensson's expertise and results will enable progress to be made in a great variety of research fields at EPFL.

Departures from ETH Zurich

Professor Christoph A. Heinrich (*1953), currently Full Professor of Mineral Resources and Geochemistry of Hydrothermal Processes, will retire with effect from 1 February 2019. Christoph A. Heinrich has been a full professor at ETH Zurich since 1997, holding a dual professorship with the University of Zurich. His research interests focus on geological processes leading to the formation of mineral resources in the earth's interior. His group also works on other fluid processes, particularly deep geothermics. He has conducted field studies throughout the world in collaboration with various industrial companies. Among other roles, Christoph Heinrich served as Director of Studies of the Department of Earth Sciences and was also head of the Institute of Geochemistry and Petrology for a number of years.

Professor Hans Jürgen Herrmann (*1954), currently Full Professor of Computational Physics for Engineering Materials, will retire with effect from 1 February 2019. Jürgen Herrmann was appointed to his present post in 2006. He has studied the fracture of heterogeneous materials since 1986 and has investigated the properties of granular media since 1992. He has achieved breakthroughs in the field of space-filling bearings and in establishing the equations of motion of dunes. His present research subjects include dense colloids, the formation of river deltas, quicksand, the failure of fibrous and polymeric composites, and complex networks. Among his other roles, Hans Jürgen Herrmann served on the Research Commission of ETH Zurich and was head of the Institute of Building Materials for several years.

Professor Christoph Keller (*1981), currently Assistant Professor of Mathematical Physics, is departing with effect from 31 December 2018. Christoph Keller was appointed to his present post in 2015. He works on conformal field theories and their applications to string theory. His work combines highly successful physical intuition with methods from modern mathematics. Christoph Keller is leaving ETH Zurich in order to take up a post as a tenure track assistant professor in the USA.

Professor Jonathan Levine (*1973), currently Full Professor of Plant Ecology, is departing with effect from 31 December 2018. Jonathan Levine has been a full professor at ETH Zurich since 2011. His research focuses on fundamental questions to do with the processes that determine the coexistence of plants. In addition, he investigates the biological reasons for the success of invasive plants and their impact on natural plant diversity. Jonathan Levine is leaving ETH Zurich in order to take up a professorship in the USA.

Professor Marcel Meili (*1953), currently Full Professor of Architecture and Design, will retire with effect from 1 February 2019. Marcel Meili was appointed to ETH Zurich in 1999. He and his long-term partner, Markus Peter, founded their own architecture firm in Zurich in 1987. Some of the recent work carried out

by Meili & Peter Architects includes the platform roofs of Zurich's main railway station, and the University of Applied Sciences of Wood in Biel. Within the Department of Architecture – and working together with Jacques Herzog, Roger Diener and Pierre De Meuron – Marcel Meili co-managed ETH Studio Basel, which has achieved international recognition for bringing research and teaching on architecture together in a new institutional format.

Professor Philipp Rudolf von Rohr (*1953), currently Full Professor of Process Engineering, will retire with effect from 1 February 2019. Philipp Rudolf von Rohr has been a full professor at ETH Zurich since 1992. His research focuses on transport processes, especially the exchange of heat and momentum, as well as on plasma-assisted processes for surface treatment, and high pressure processes on the micro and macro scale. In his teaching, he covered the principles of process engineering, plant engineering and multiphase flows. Philipp Rudolf von Rohr was head of the Institute of Mechanical Systems for many years, and has also served as head of the Department of Mechanical and Process Engineering.

Professor Peter Widmayer (*1953), currently Full Professor of Computer Science, will retire with effect from 1 February 2019. Peter Widmayer was appointed to his present post in 1992. His research interests lie in basic algorithmic solutions to real algorithmic problems. He has a particular methodological focus on algorithms for problems that are geometric and combinatorial in nature. The topics covered include problems of reconstruction in areas such as biology, route planning and railway optimisation. Peter Widmayer has been very active on behalf of the research community and ETH Zurich, where he served on a number of bodies over many years, including as a head of department and as a member of the University Assembly, the ICT Commission and the Research Commission.

Departure from EPFL

Professor Inès Lamunière (*1954), currently Full Professor of Design and Architectural Theory, will retire with effect from 1 November 2018. Inès Lamunière was appointed to her present post in 1994. Through her research and teaching and her achievements as a designing architect (which include the Life Sciences faculty building on the EPFL campus), she has made a substantial contribution to the development of architecture at EPFL, in Switzerland and internationally. In the course of her career she has received various awards, such as the Prix Meret Oppenheim presented by the Federal Office of Culture. In 2001 Inès Lamunière took the pioneering step of founding the Laboratory for Architecture and Urban Mobility (LAMU) at EPFL. LAMU addresses the challenges arising from new modes of mobility and urbanisation.

The ETH Board would like to thank the departing professors for their services to science, teaching and academic administration.

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The ETH Board is the strategic management and supervisory body of the ETH Domain. The ETH Domain is made up of the two Federal Institutes of Technology, i.e. ETH Zurich and EPFL, as well as the four federal research institutes PSI, WSL, Empa and Eawag. The members of the ETH Board are appointed by the Swiss Federal Council. The ETH Board supervises the development plans of the institutions, is responsible for strategic management accounting and ensures coordination. It draws up the budget and the financial statements of the ETH Domain and coordinates the value maintenance and continued functionality of the properties. It is the authority responsible for appointments and represents the ETH Domain before the federal authorities. A staff unit assists the ETH Board in the preparation and implementation of its business.