

Meeting of the ETH Board on 22/23 September 2021

## **22 new professors appointed at ETH Zurich and EPFL**

**At its meeting of 22/23 September 2021 and upon application of the President of ETH Zurich, Professor Joël Mesot, and the President of EPFL, Professor Martin Vetterli, the ETH Board appointed a total of 14 women and 8 men as professors and awarded the title of professor to one individual. It also took note of the resignations of seven professors and thanked them for their services. In the last 12 months, the ETH Board has made a total of 23 new appointments for women and 30 for men; the proportion of women among these new appointments amounts to 43%.**

Bern/Zurich, 23 September 2021

### **New appointments at ETH Zurich**

**Professor Lint Barrage** (\*1985), currently Assistant Professor at the University of California, USA, as Associate Professor of Energy and Climate Economics in the Department of Management, Technology and Economics. Lint Barrage's research focuses on the macroeconomic and social consequences of ecological developments and environmental policy decisions. She has a particular interest in the effects of energy and climate policy on economic development. The appointment of Lint Barrage boosts the Department's competences and research activities in energy economics and policy. It will also create important synergies with colleagues at the Center for Energy Policy and Economics and the Energy Science Center.

**Florian Tramèr** (\*1991), currently a doctoral student at Stanford University, USA, as Tenure Track Assistant Professor of Computer Science in the Department of Computer Science. Florian Tramèr conducts research at the interface of privacy, security and machine learning. He is completing a doctoral thesis about attacks on machine learning systems. His work on visual ad blockers caught the attention of the industry and influenced Adblock Plus, a leading ad blocking application with millions of users. Florian Tramèr has also been working on the privacy and security of smart contracts and cryptocurrencies. His appointment significantly improves the links between the Department's research programmes in IT security and machine learning.

**Dr Michal Wieczorek** (\*1987), currently Postdoctoral Fellow at Rockefeller University in New York, USA, as Assistant Professor of Integrative Approaches in Structural Biology in the Department of Biology. Michal Wieczorek's research focuses on the study of the cytoskeleton. Disruptions in cytoskeletal processes can be a cause of illness, and a number of cancer treatments aim to eliminate them. The appointment of Michal Wieczorek is an ideal opportunity for the Department of Biology to strengthen intradepartmental links between the research areas of biochemistry, cell biology, structural biology and biophysics. Interactions and synergies will also be created with colleagues at the Paul Scherrer Institute (PSI) and in the health sciences and chemistry.

**Professor Sarah Zerbes** (\*1978), currently Full Professor at University College London, United Kingdom, as Full Professor of Mathematics in the Department of Mathematics. Sarah Zerbes' field of research is number theory, particularly arithmetic geometry. She has recently developed new methods of constructing Euler systems. These new tools have enabled her to make radical advances in relation to the Birch and Swinnerton-Dyer conjecture, which is one of the most famous and enigmatic mathematical problems yet to be solved. Sarah Zerbes has won numerous awards, including an ERC Consolidator Grant in 2015. By appointing Sarah Zerbes as a full professor, the Department of Mathematics is gaining one of the world's leading number theorists, who will strengthen this important area of mathematics.

#### **Promotions at ETH Zurich**

**Professor Marco Hutter** (\*1985), currently Tenure Track Assistant Professor at ETH Zurich, as Associate Professor of Robotic Systems in the Department of Mechanical and Process Engineering. Marco Hutter is head of the Robotic Systems Lab and works on the development of intelligent robotic systems for use in challenging environments. He devises novel concepts of serial elastic actuation for legged robots. In 2017, research projects led by Marco Hutter resulted in the foundation of ANYmal and the ANYmal Research Initiative, one of the most important cooperation networks in the area of legged robotic systems. He is an internationally acclaimed pioneer and leader in his field and has won multiple awards, including an ERC Starting Grant in 2019.

**Professor Tanja Stadler** (\*1981), currently Associate Professor at ETH Zurich, as Full Professor of Computational Evolution in the Department of Biosystems. Tanja Stadler develops mathematical and bioinformatic methods of identifying dynamic processes and is acknowledged to be a leading researcher in the new field of phylogenetic dynamics. She has an outstanding list of publications to her name and has received many prestigious awards, including an ERC Starting Grant in 2013 and an ERC Consolidator Grant in 2021. Tanja Stadler has been a member of the Swiss National COVID-19 Science Task Force since it was founded in March 2020; she became head of the Task Force in August 2021.

#### **New appointments at EPFL**

**Dr Tiffany Abitbol** (\*1980), currently Research Scientist at the Research Institutes of Sweden (RISE), Sweden, as Tenure Track Assistant Professor of Materials Science and Engineering in the School of Engineering. Tiffany Abitbol conducts research on cellulose, with particular reference to nanocellulose and ecomaterials. Her aim is to develop new, functional materials from biobased components. In the context of pressing environmental issues, Tiffany Abitbol has a key role to play in the development of sustainable materials. Her appointment will strengthen and expand the visibility of this field at EPFL, while creating new cooperations with other areas of the Federal Institute and with partners in industry.

**Dr Meret Aeppli** (\*1989), currently Postdoctoral Fellow at Stanford University, USA, as Tenure Track Assistant Professor of Environmental Engineering in the School of Architecture, Civil and Environmental Engineering. Meret Aeppli investigates redox reactivity and the role of soil in the global carbon cycle. The aim of her research is to find sustainable ways of protecting soil carbon and reducing the negative effects of climate change. At EPFL she will set up a research programme to explore the carbon cycle in watershed areas, with particular emphasis on the study of carbon stabilisation in soils at contrasting locations commonly found in Switzerland, such as high altitudes and floodplains.

**Professor Olga Fink** (\*1983), currently Assistant Professor at ETH Zurich and Research Affiliate at Massachusetts Institute of Technology (MIT), USA, as Tenure Track Assistant Professor of Civil Engineering in the School of Architecture, Civil and Environmental Engineering. Olga Fink's research focuses on the development of intelligent algorithms in complex infrastructures and industrial systems. She is a recognised expert in the fields of deep learning and hybrid algorithms for intelligent maintenance systems. Olga Fink is a member of numerous committees, serves as an expert for Innosuisse, and participates in various working groups at ETH Zurich. Her expertise and research interests will significantly strengthen civil engineering at EPFL in the area of predictive maintenance of infrastructure systems.

**Professor Maryam Kamgarpour** (\*1982), currently Assistant Professor at the University of British Columbia, Canada, and Assistant Professor at ETH Zurich, as Tenure Track Assistant Professor of Mechanical Engineering in the School of Engineering. Maryam Kamgarpour develops control theories and algorithms for secure, reliable cyber-physical systems; these find applications in areas ranging from smart power grids and smart transport networks to robotics. This field of research is crucial to the seamless operation of autonomous systems, for which safety and reliability are the top priority. Maryam Kamgarpour, who was awarded an ERC Starting Grant in 2016, will be a great asset to EPFL and help meet the growing needs of the Institute of Mechanical Engineering.

**Professor Marianne Liebi** (\*1984), currently Group Leader at Empa and Adjunct Associate Professor at Chalmers University of Technology, Sweden, as Tenure Track Assistant Professor of Materials Science in the School of Engineering and at the Paul Scherrer Institute (PSI). Marianne Liebi's work has a focus on developing methods for studying the structure of materials, including materials of biological origin such as bones, using X-rays. This innovative researcher is in great demand internationally and has built up an extensive network of partnerships. She is a very committed teacher and a role model for future generations of women engineers. By appointing Marianne Liebi, EPFL and PSI are strengthening a complex and topical field of research.

**Professor Charlotte Malterre-Barthes** (\*1977), currently Assistant Professor at Harvard University, USA, as Tenure Track Assistant Professor of Urban and Architecture in the School of Architecture, Civil and Environmental Engineering. Charlotte Malterre-Barthes' works on urgent aspects of contemporary urbanisation, conducting research on how design and planning can engage with questions of fair access to resources, the mainstream economy, better governance, and ecological/social justice. She investigates interrelated topics such as climate emergency, materials, food systems, migration, self-initiated urbanism, and real-estate, with the help of various technologies, from satellite images to field work. Charlotte Malterre-Barthes spent six years as director of the Master's degree in Urban Design at ETH Zurich, and is a co-founder of the the Parity Group and of the Parity Front, associations dedicated to improving equity in architecture. She is also a member of several committees and co-director of her own urban design practice.

**Dr Kirsten Moselund** (\*1976), currently a Research Staff Member at IBM Research Zurich, as Full Professor of Electronics and Microtechnology in the School of Engineering and at the Paul Scherrer Institute (PSI). Kirsten Moselund's work has an emphasis on the design, fabrication and characterisation of new nanoelectronic components with very low power consumption. Her research is notable for combining technology with physics in a way that enables her to design innovative devices. Kirsten Moselund is to head a laboratory at PSI which focuses on the use of nanotechnology in the area of short-wave light. She will strengthen its collaboration with EPFL and industry. Her many years of industrial experience will also allow her to facilitate the founding of new start-ups.

**Dr Anirudh Raju Natarajan** (\*1990), currently Postdoctoral Researcher at the University of California, USA, as Tenure Track Assistant Professor of Materials Science in the School of Engineering. Anirudh Natarajan conducts research in the area of materials theory and simulation with the aim of discovering and synthesising new materials. His ambitious research plan looks at a range of problems connected with materials science that may potentially lead to important applications. At the same time, he will be working to develop simulation methods further. This exceptional researcher will play a key role in expanding and diversifying EPFL's activities in the field of materials modelling.

**Professor Sarah Nichols** (\*1984), currently Assistant Professor at Rice University, USA, as Tenure Track Assistant Professor of Architecture in the School of Architecture, Civil and Environmental Engineering. Sarah Nichols carries out research into the history of construction materials, how they are produced, and construction practice in Switzerland in the context of political and ecological concerns. Her current focus is on the role of concrete, an area in which she is making an important contribution to the debate about the circular economy and the demand for sustainable construction materials. With the appointment of this up-and-coming architectural historian and theoretician, the institute is strengthening its teaching and scientific influence in a research area of great social importance.

**Professor Stefana Parascho** (\*1986), currently Assistant Professor at Princeton University, USA, as Tenure Track Assistant Professor of Architecture in the School of Architecture, Civil and Environmental Engineering. Stefana Parascho is a researcher, architect and lecturer who works at the interface between architecture and digitalisation; her main interests are computational design and integrative models of architecture, and she has won multiple awards for her research. Her aim is to promote an interdisciplinary approach to architecture through the development of digital production methods and robot-assisted manufacturing processes. Stefana Parascho has all the academic and personal qualities of a first-class researcher and lecturer; she will be an asset to EPFL in this socially relevant field.

**Dr Andrew Sonta** (\*1993), currently Postdoctoral Fellow at the University of Columbia, USA, as Tenure Track Assistant Professor of Civil Engineering in the School of Architecture, Civil and Environmental Engineering. Andrew Sonta's research focuses on data-driven modelling, analysis and design techniques for the enhancement of social and environmental objectives in the built environment. He aims to address urban sustainability challenges through a multidisciplinary lens. Andrew Sonta also studies the physical connections between energy consumption and the efficient operation of buildings. In addition to developing a new research programme, he will contribute to new clusters involving the School, the Smart Living Lab in Fribourg and the recently founded Center for Climate Impact and Action (CLIMACT).

### **Promotions at EPFL**

**Professor Esther Amstad** (\*1983), currently Tenure Track Assistant Professor at EPFL, as Associate Professor of Materials Science in the School of Engineering. Esther Amstad conducts research in the areas of materials chemistry, microfluidics, polymer science and biomimetic materials. Her creative approach to applied research has brought her international recognition in the field of soft matter, which her work is taking in new directions. Through significant academic and industrial partnerships, high-quality teaching and innovative research she will help strengthen the discipline of materials science and bring together different fields of science and engineering.

**Professor David Atienza Alonso** (\*1978), currently Associate Professor at EPFL, as Full Professor of Electrical Engineering and Electronics in the School of Engineering. David Atienza develops high-performance embedded systems and multiprocessor integrated circuits for the Internet of Things. He is an international expert in the field of 3D integrated circuits and has made significant contributions to multiprocessor systems-on-chip (MPSoC), with applications in Edge AI and cloud systems. David Atienza aims to assist with the next phase of the digital data revolution and address the ecological and economic consequences of the era of the Internet of Things in a responsible way.

**Professor Bruno Emanuel Ferreira De Sousa Correia** (\*1980), currently Tenure Track Assistant Professor at EPFL, as Associate Professor of Bioengineering in the School of Engineering. Bruno Correia's research investigates protein design, particularly protein synthesis and protein structure prediction – an area with a vital role to play in vaccine development. Thanks to his original research, which uses both a computational and an experimental approach, Bruno Correia is regarded as one of the world's leading researchers in the field of protein synthesis, vaccine design and gene therapy. His academic and industrial collaborations help strengthen the key discipline of bioengineering.

**Professor Brice Lecampion** (\*1976), currently Tenure Track Assistant Professor at EPFL, as Associate Professor of Geo-Energy in the School of Architecture, Civil and Environmental Engineering. Brice Lecampion's work focuses on fundamental and applied research topics connected with subsurface geo-energy projects (deep geothermics, CO<sub>2</sub> storage, gas extraction and storage) with the aim of improving practice within the industry and making expert knowledge available to political decision-makers, regulatory authorities and the general public. With his solid industrial experience and his experimental work, he makes a substantial contribution to his specialist area, in which he is regarded as one of the world's leading researchers.

**Professor Elisa Oricchio** (\*1979), currently Tenure Track Assistant Professor at EPFL, as Associate Professor of Life Sciences in the School of Life Sciences. Elisa Oricchio's research seeks to understand the role of genetic and epigenetic changes in carcinogenesis, and how these changes influence the patient's response to cancer treatments. She has developed very sophisticated methods for use in genomics and chromatin structural analysis: these are of great interest to the entire school. Her work is not only of fundamental scientific significance, but also identifies potential new targets for the development of cancer treatments. This well-known researcher is the leading expert in her field as well as being a popular lecturer among students.

#### **Award of the title of Professor**

**Dr Anastasios Vassilopoulos** (\*1972), currently Senior Scientist in the School of Architecture, Civil and Environmental Engineering at EPFL, as Adjunct Professor at EPFL. Anastasios Vassilopoulos investigates advanced materials for sustainable structures. At the School he has successfully developed a research area which looks at fatigue damage in building components made of composite materials. His work is making a key contribution to a new generation of advanced materials and he is regarded as the leading researcher in his field.

**Departures from ETH Zurich**

**Professor Michael Ambühl** (\*1951), currently Full Professor of Negotiation and Conflict Management in the Department of Management, Technology and Economics, is to retire at the end of January 2022. Michael Ambühl studied at ETH Zurich and completed his doctorate there in 1980. From 1982 to 2013 he was a public servant; his career included a posting to the Swiss Mission to the EU in Brussels and serving both as Head of the Integration Office and as State Secretary. He played a substantial part in many important negotiations, and in 2013 the ETH Board appointed him as a full professor so that he could share his experience of politics and diplomacy via university teaching and research. In addition to holding his professorship, Michael Ambühl set up the Swiss School of Public Governance (SSPG), of which he is Director.

**Professor Michael Detmar** (\*1957), currently Full Professor of Pharmacogenomics in the Department of Chemistry and Applied Biosciences, will retire at the end of January 2022. Michael Detmar joined ETH Zurich as a full professor in 2004. His research focuses on tumour biology, the molecular control of chronic inflammation and the development of individualised therapies. In 2015 he received the accolade of election as a member of the German National Academy of Sciences Leopoldina. Michael Detmar was a member of the National Research Council of the SNSF from 2013 to 2021. He has been awarded numerous prizes, has co-edited several academic journals and is an adviser to a number of international institutions and companies.

**Professor Qiuting Huang** (\*1957), currently Full Professor of Electronics in the Department of Information Technology and Electrical Engineering, is to retire at the end of January 2022. Qiuting Huang joined ETH Zurich as an assistant professor in 1993. Over the past 30 years he has carried out pioneering work in a multitude of disciplines in the field of integrated circuits and systems. He is also regarded as one of the leading experts on high-frequency integrated circuits for wireless and mobile communication. From 2013 to 2015 he was Director of Studies at the Department of Information Technology and Electrical Engineering. Qiuting Huang is a committed university lecturer who has received numerous awards and prizes; he continues to serve on various committees.

**Professor Simon Löw** (\*1956), currently Full Professor of Engineering Geology in the Department of Earth Sciences, is to retire at the end of January 2022. Simon Löw joined ETH Zurich as a full professor in 1996. His research has a focus on hydro-mechanical processes in fractured rocks at project relevant scales. He is regarded as an international expert in the fields of nuclear waste repositories, deep tunnels and rock mass behaviour. Simon Löw is currently President of the Swiss Commission for Nuclear Waste Disposal (EGT). He had a decisive impact on the destiny of the Geological Institute at ETH Zurich during his many years as Dean or Deputy Dean.

**Professor Danilo Pescia** (\*1956), currently Full Professor of Experimental Physics in the Department of Physics, will retire at the end of January 2022. Danilo Pescia studied physics at ETH Zurich and was appointed to an associate professorship in 1992. His research focuses on magnetism in low-dimensional systems and their phase transitions with the highest spatial and temporal resolution. In recognition of his ground-breaking work on magnetism in 3D metals, as well as developing the foundations for the manufacture of very thin layers of transition metals, Danilo Pescia was elected an individual member of the Swiss Academy of Engineering Sciences in 2018. He was Delegate of Studies for the Department of Physics for many years, alongside his work as a university teacher.

**Professor Annette Spiro** (\*1957), currently Full Professor of Architecture and Construction in the Department of Architecture, is to retire at the end of January 2022. Annette Spiro studied architecture at ETH Zurich and became a full professor in 2007. Her work focuses on the use of technology in the building sector, and investigates questions to do with integrating construction into architectural design. Both her research and her teaching have had an influence on the practice of architecture. Annette Spiro is an enthusiastic teacher who has developed innovative didactic approaches. Her architectural works have contributed to the Department's international reputation in the discipline of architecture. She has also served as Dean of the Department and as a member of several committees.

#### **Departure from EPFL**

**Professor Pablo Rivera-Fuentes** (\*1984), currently Tenure Track Assistant Professor of Chemical Biology, is to leave EPFL at the end of January 2022. Pablo Rivera-Fuentes conducts research in the areas of molecular imaging, organic synthesis and biological chemistry. His focus is on visualising intracellular connections in order to acquire a better understanding of the interplay between the processes occurring in cells. He is leaving to take up an associate professorship at the University of Zurich.

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

#### **Enquiries**

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#### **ETH Board, Hirschengraben 3, CH-3011 Bern, [www.ethboard.ch](http://www.ethboard.ch)**

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 assists the ETH Board in the preparation and implementation of its business.