

Meeting of the ETH Board on 7/8 December 2016

## 11 professors appointed at ETH Zurich and EPFL

**Bern, 9 December 2016 – In response to the proposals received from the President of ETH Zurich, Professor Lino Guzzella, and the President of EPFL, Professor Patrick Aebischer, the ETH Board resolved at its meeting of 7/8 December 2016 to appoint a total of 11 professors and award the title of professor to one individual; it also acknowledged the resignation of two professors and thanked them for their services.**

### Appointments at ETH Zurich

**Professor Maarten Delbeke** (\*1970), currently Full Professor at Ghent University, Belgium, as Full Professor of History and Theory of Architecture. Maarten Delbeke is an internationally renowned expert on the period from the Early Modern era to the present, with a special focus on the art and architecture of the 17th century and its echoes in the 20th century, as well as on the architectural theory of the 18th and 19th centuries. He is the founder and editor-in-chief of the first open access journal on architectural theory, which he launched with the help of a grant. By appointing Maarten Delbeke, the history section of the Department of Architecture is building an important bridge between the technical disciplines and the humanities at ETH Zurich.

**Professor Irena Hajnsek** (\*1970), currently Associate Professor at ETH Zurich, as Full Professor of Earth Observation and Remote Sensing. Irena Hajnsek is one of the world's leading scientists in the field of remote sensing using radar waves and in the application of satellite radar data. A key focus of her work is the development of bio/geophysical inversion models for determining environmental parameters such as soil moisture from multi-parametric SAR data. Her results contribute significantly to improving global environmental monitoring and forecasting harvests and food security. Irena Hajnsek's versatility offers ETH Zurich considerable potential for networking and innovation.

**Professor Dominik Hangartner** (\*1981), currently Associate Professor at the London School of Economics, United Kingdom, as Associate Professor of Public Policy. Dominik Hangartner is an internationally acclaimed expert on migration. His award-winning research findings on the life of migrants and the effects of migration on host countries have also generated interest in the media and the political arena. His research topics include current issues such as the effects of long asylum procedures on the integration of refugees into the labour market, and the misgivings about asylum seekers in European societies. In Dominik Hangartner, ETH Zurich is appointing a scientist who will make substantial contributions to the debate about migration.

**Professor Jonathan Home** (\*1979), currently Tenure Track Assistant Professor at ETH Zurich, as Associate Professor of Experimental Quantum Information. Jonathan Home's main research focus is on the topics of quantum state engineering, simulation and information processing using ion traps. Using the precise control available with this technology, he investigates interactions between a quantum system and its environment. By appointing Jonathan Home, this year's winner of the ETH Zurich Latsis Prize, the Federal Institute of Technology is retaining a highly qualified scientist and underlining the great importance it attaches to the quantum sciences and quantum technologies.

**Professor Dennis M. Kochmann** (\*1982), currently Professor at the California Institute of Technology, Pasadena, USA, as Full Professor of Mechanics and Materials. Dennis Kochmann has a particular research interest in the modelling and design of solid bodies. He investigates the evolution of microstructure, for example, by means of models that bridge across scales from atomistics to the continuum, using analytical, numerical and experimental methods. By appointing Dennis Kochmann, whose work has won several awards, the Department of Mechanical and Process Engineering is gaining an ideal complement to its expertise in the field of mechanical engineering, particularly at the interface with materials science.

**Professor Maksym Kovalenko** (\*1982), currently Tenure Track Assistant Professor at ETH Zurich, as Associate Professor of Functional Inorganic Materials. Maksym Kovalenko has achieved internationally acclaimed research results in the area of nanocrystalline semiconductor materials. His achievements include developing a completely new method of manufacturing colloidal nanocrystals. These are used in electronic, optoelectronic and infrared optical components, for example. His work has been awarded an ERC Starting Grant, among others. Through the appointment of Maksym Kovalenko as an associate professor, ETH Zurich is strengthening its research in the forward-looking field of inorganic functional materials.

**Professor Markus Niederberger** (\*1970), currently Associate Professor at ETH Zurich, as Full Professor of Multifunctional Materials. Markus Niederberger is an internationally renowned scientist with an excellent network of contacts. His research has a particular focus on precise synthesis processes for the manufacture of new kinds of functional materials with optimised properties. His results are used in areas such as energy storage (batteries), energy conversion, gas sensor technology and electronics. These research areas are an excellent fit with ETH Zurich's general strategy. Markus Niederberger is also an outstanding university lecturer. In 2013, the students awarded him the "Golden Owl" for his exceptional commitment to teaching.

**Professor Christian Wolfrum** (\*1972), currently Associate Professor at ETH Zurich, as Full Professor of Translational Nutrition Biology. Christian Wolfrum is an internationally recognised expert on obesity. His research concentrates on identifying factors that promote the development of obesity and its complications, such as diabetes. Its main focus is on the interaction of lipids and their derivatives with cellular receptors and the ensuing modulation of transcriptional processes. Christian Wolfrum has already received numerous awards for his work on this nutritional and metabolic disorder, which causes huge problems throughout the world, both for the individuals concerned and in terms of its economic impact.

### Appointments at EFPL

**Professor Sarah Kenderdine** (\*1966), currently Professor at the University of New South Wales, Paddington, Australia, as Full Professor of Digital Museology. Sarah Kenderdine organises exhibitions throughout the world and conducts research at the interface of humanities and social sciences on the one hand and engineering sciences on the other. She focuses on the visualisation and conservation of data, on interactive virtual environments and on the preservation and interpretation of the intangible cultural heritage. In appointing her, EPFL is giving a significant boost to the recently opened ArtLab, as well as to research and teaching in the digital humanities. Sarah Kenderdine will also play a central role in setting up the master's degree course in Digital Humanities.

**Professor Stéphanie Lacour** (\*1975), currently Associate Professor at EPFL, as Full Professor of Microtechnology and Bioengineering. Stéphanie Lacour was promoted to associate professor six months ago. She is now being appointed as a full professor in recognition of her further excellent achievements, which include obtaining an ERC Proof of Concept Grant. Stéphanie Lacour is internationally recognised as a pioneer in the development of electronic systems that interact with human tissue. The results she has obtained with her interdisciplinary approach find application in areas such as the design of intelligent prostheses and artificial skin fitted with sensors. She will play a key role in the future development of Campus Biotech in Geneva.

**Dr Maryna Viazovska** (\*1984), currently a post-doctoral student at the Humboldt University of Berlin, Germany, as Tenure Track Assistant Professor of Mathematics. Maryna Viazovska is a highly gifted young academic who shows great promise. In spring 2016 she received international media attention by solving the sphere-packing problem in dimensions 8 and 24. Her success drew on her outstanding knowledge of the theory of automorphic forms, a branch of number theory. Maryna Viazovska's groundbreaking findings are not just of theoretical significance, but also enable advances to be made in

areas of application such as information theory and programming error correction processes – research areas in which EPFL is particularly strong.

**Professor Guillermo Villanueva** (\*1979), currently SNSF Professor at EPFL, as Tenure Track Assistant Professor of Mechanical Engineering. Guillermo Villanueva is an internationally renowned specialist in the field of nano- and micro-electromechanical systems. Among other topics, he is interested in improving the resonators used in detectors, trackers and communication devices, for example. He is regarded as a pioneer in the study of non-linear phenomena in nano-resonators. Guillermo Villanueva's scientific focus offers great potential for collaborations within EPFL and with other leading institutions. He will also significantly strengthen teaching in the field of mechanical engineering.

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

**Professor Mark Mescher** (\*1969), currently Senior Scientist at ETH Zurich and Adjunct Associate Professor at Pennsylvania State University, USA, as Adjunct Professor at ETH Zurich. Mark Mescher specialises in the interactions between plants, insects and parasites. His research is of great importance for the understanding of natural ecosystems.

#### **Departures from EPFL**

**Professor Christos Kozyrakis** (\*1974), Full Professor of Computer Science and Communication Systems, left EPFL in mid-September 2016 in order to return to the USA. Christos Kozyrakis had been working at EPFL since September 2015. His special areas are computer architecture and the energy efficiency of information systems.

**Professor Alfio Quarteroni** (\*1952), currently Full Professor of Numerical Analysis, will retire at the beginning of 2018. Alfio Quarteroni was appointed to EPFL in 1998 following a successful scientific career. He then played a key role in developing computer-assisted mathematics. It is partly thanks to his efforts that the Federal Institute of Technology is now a world leader in numerical mathematics and scientific computing. In his research, Alfio Quarteroni focused on topics such as mathematical modelling, numerical analysis and scientific computing applications. Among other things, his group provided Alinghi, the America's Cup winner, with assistance in the area of optimisation calculation.

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

#### **Inquiries**

Gian-Andri Casutt, Head of Communication  
Phone +41 (0)44 632 20 03  
Mobile +41 (0)79 636 94 64  
[gian.casutt@ethrat.ch](mailto:gian.casutt@ethrat.ch)

**ETH Board, Haldeliweg 15, CH-8092 Zurich, [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 unit assists the ETH Board in the preparation and implementation of its business.