ETHzürich

ETH Week 2017
Manufacturing the Future

Programme and Guest Factsheet

ETH Week 2017
Manufacturing the Future
10–15 September

Welcome to 'Manufacturing the Future', the third edition of ETH Week. This year, 180 students from 30 countries and all across ETH Zürich will come together to work in interdisciplinary teams.

They will focus on the emerging technologies in the field of manufacturing and the exciting (as well as contentious) societal questions they entail. We look forward to putting technology in the context of a far reaching discussion which impacts the society we live in, the economy we work in, and the environment we are going to leave to future generations. Our aim is to design an inclusive and positive event, where students learn the state-of-the-art from professors and where professors learn from the critical attitude, enthusiasm and drive of the students to rethink and redesign the world we live in today.

ETH Week runs over the course of 6 days. Each day has a specific focus. As organisers, our role is to provide the students with just enough structure to engage in a process that fosters creativity and critical thinking. Although much time is reserved for teamwork, students will also receive in-depth input through a variety of formats: excursions, a knowledge fair, technical and societal panels, keynotes, feedback loops and inspiration nights. In addition, the ETH Week Hall and the schedule are designed specifically to create an empowering environment with opportunities for informal exchange.

We would like to kindly thank you for joining a group of experts of over 100 researchers, industry partners, critical thinkers and representatives from society who make this event possible.

An overview of the whole programme can be found here:
www.ethz.ch/ethweek →

Sunday, 10 September

Team building, bringing together disciplinary expertise and setting out the spirit of the week.

12.00	Registration Desk opens

13.15   **Opening ETH Week**
Lino Guzzella, President, ETH Zürich and
Alexandra Waskow, ETH Week Alumni

14.00   Design Challenge and Teamwork

18.30   **Entrepreneurship Night**

The Role of Manufacturing in Switzerland
Hans Hess, President, Swissmem
Detlef Günther, Vice President Research
and Corporate Relations, ETH Zürich

Failing Forward Panel
Detlef Günther will moderate a discussion with Hans Hess and
the founders and CEOs of these Spin-offs of ETH Zürich:
Samuel Halim, Avantama AG
Wulf Glatz, greenTEG AG
Keith Gunura, noonee AG
Sandra Neumann, Peripal AG
Samuele Tosatti, SuSoS AG
Oliver Kläusler, Swiss Wood Solutions AG

19.30   **Fair with Spin-offs of ETH Zürich**
and interactive dinner

For all speakers, a stage test is scheduled 30 min before the public event.
The booths of the spin-off fair may be set up 90 min in advance.

Monday, 11 September

Overview and critical reflection of the topic,
field trips and a general focus on empathy.

9.00   **Overview Input**
            Larissa Schefer, ETH Competence Center
            for Materials and Processes (MaP)

10.15   **Excursions ***
            ABB Schweiz AG, Semiconductors Division
            Blumer-Lehmann AG
            Botanical Garden, UZH
            General Electric (Switzerland) GmbH
            IBM Research GmbH
            InnoRecycling AG and InnoPlastics AG
            NCCR Digital Fabrication at NEST, Empa Dübendorf
            Perlen Papier AG
            Subitex Research Initiative, Empa St. Gallen
            Swiss Steel AG

15.30   ETH Week Hall reopens

16.00   Teamwork

18.30   Dinner

19.45   **Critical Thinking Night**

            What is at Stake
            Philipp Blom, Writer, Journalist, Lecturer and Broadcaster

            * the ETH Week Hall closes during the excursions.

For all speakers, a stage test is scheduled 30 min before the public event.

Tuesday, 12 September

Adding structure by introducing three angles and
funneling information from fair to a first problem.

9.00   **Deep Dive Dialogues**
             with ETH Zürich professors from different disciplines:
             Ingo Burgert, Wood Materials Science
             Fabio Gramazio, Architecture and Digital Fabrication
             Gudela Grote, Work and Organizational Psychology
             Andreas Krause, Learning and Adaptive Systems
             Mirko Meboldt, Product Development and Engineering Design
             André Studart, Complex Materials

13.30   **Knowledge Fair and Networking Event**

16.00   Teamwork

18.30   Dinner

19.45   **Technical Panel**
             Paul Beck, Maestrani AG
             Andri Fritz, Franke Water Systems AG
             Kathrin Michel, Rahn AG
             Paolo Zanone, Bühler AG
             Jan Zimmermann, Forster Rohner Textile Innovations AG

             The discussion focuses on the implications of
             new technologies in different industry sectors
             and is moderated by ETH Zürich professor
             Torbjörn Netland, Production and Operations Management

For all speakers, a stage test is scheduled 30 min before the public event.
The booths of the knowledge fair may be set up 90 min in advance.

Wednesday, 13 September

Bringing the discussion to a societal level and first ideation round to develop solutions. Critical analysis.

9.00   **Societal Panel**
Jan-Egbert Sturm, Director of KOF, ETH Zürich
Tobias Straumann, Professor for Economic History, UZH
Johannes Schumm, Vice President R&D, Sensirion
Toni Wäfler, Professor for Applied Psychology, FHNW

The discussion critically reflects the future of work in the manufacturing context and is moderated by Sunnie J. Groeneveld, Managing Partner of Inspire 925

10.30   Teamwork

18.45   **Robotics Night ***

Interdisciplinary Research in Digital Fabrication
Russell Loveridge, Managing Director, NCCR Digital Fabrication
Michael Lyrenmann, Lead Technician, RFL, ETH Zürich

Robot Fair and Interactive Dinner
with over 12 field robot demos developed at ETH Zürich

* This is a joint event together with the FSR and AMPA Conferences.

For all speakers, a stage test is scheduled 30 min before the public event.

Thursday, 14 September

A second ideation round. Prototyping to make ideas tangible. Integrating feedback from experts.

9.00   Teamwork

13.00   Feedback Round
            with experts of ETH Zürich from various disciplines:
            Benjamin Dillenburger, Digital Building Technologies
            Stelian Coros, Computational Robotics
            Lucio Isa, Interfaces, Soft Matter and Assembly
            Simone Schürle, Responsive Biomedical Systems
            Torbjörn Netland, Production and Operations Management
            Philippe Knüsel, Optical Materials Engineering
            Andreas Krause and Hoda Heirdari,
            Learning and Adaptive Systems
            Fabio Gramazio and David Jenny,
            Architecture and Digital Fabrication
            Irina Stoller and Nadine Bienefeld,
            Work and Organizational Psychology
            Ingo Burgert and Etienne Cabane,
            Wood Materials Science
            Stefan Boës and Martin Batliner,
            Product Development and Engineering Design
            Kunal Masania and Rafael Libanori,
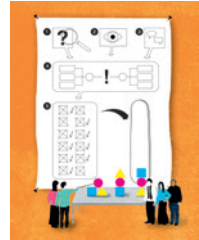   Complex Materials

14.30   Teamwork

18.45   Dinner

All experts joining the feedback round meet at 12.30 at the Info Desk.

Friday, 15 September

Gathering last puzzle pieces for the 18 identified
problems and solutions, before forming a joint outcome.

9.00	**Keynote** Christiane Leister, Owner of the Leister Group and President of the Supervisory Board at Leister AG
10.15	Teamwork
15.00	**Final Event** Opening Address by Sarah M. Springman, Rector, ETH Zürich **Presentations** by ETH Week student teams, graphically recorded by André Sandmann, Graphic Recording, Pikka GmbH
18.00	Break
19.15	**Concluding Panel *** with ETH Zürich professors from different disciplines: Stelian Coros, Computational Robotics Benjamin Dillenburger, Digital Building Technologies Lucio Isa, Interfaces, Soft Matter and Assembly Simone Schürle, Responsive Biomedical Systems moderated by Larissa Schefer, ETH Competence Center for Materials and Processes (MaP)
20.30	**Celebrations** Music by David Suivez

* This is a private event, reserved for the students, experts and professors of ETH Zürich.

Location Details

The event will take place in the **ETH Week Hall** on Campus Hönggerberg. It is located on the ground floor of the HIB building (Arch_Tec_Lab), Stefano-Franscini-Platz 1, 8093 Zurich. Please register at the Info Desk where you will receive your badge.

How to reach the venue
– from Zurich Main Station, take tram 11 (Direction: Auzelg) or tram 14 (Direction: Seebach), then change to bus 69 (Direction: ETH Hönggerberg).
– from ETH Zentrum Campus, the ETH Link runs every 20 min until 18.14.
– from Zurich Oerlikon, take bus 80 (Direction: Triemli) to ETH Hönggerberg.
– by car, follow Parking P2. Parking permits are available at the Info Desk.

Issues during ETH Week? Reach the Info Desk (8.00–20.00) at 044 633 99 10.

Contact
ETH Zürich
Office ETH Week
Stampfenbachstrasse 52
8092 Zurich

ethweek@ethz.ch
www.ethz.ch/ethweek

Knowledge Fair

3A Composites Core Materials, Airex AG	Roman Gätzi Head Technical Services and Global P.M. Solutions Engineering
Bcomp AG	Julien Rion Technical Director and Co-Founder
Bühler AG	Paolo Zanone Managing Director Bühler Brescia and Head of European Remanufacturing Centre
Tissue Engineering and Biofabrication D-HEST, ETH Zürich	Marcy Zenobi-Wong Professor
Cassantec AG	Frank Kirschnick CTO and Co-Founder
Chair of Entrepreneurship D-MTEC, ETH Zürich	Anil Sethi Entrepreneur in Residence
CTI Commission for Technology and Innovation	Martin Riediker Vice President
Ecoparts AG	Daniel Kündig Managing Director and Co-Founder
Engineering Design and Computing D-MAVT, ETH Zürich	Tino Stanković Senior Assistant Alexandra Blösch Doctoral Student
ERNE AG Holzbau	Thomas Wehrle Vice Director
Ethics and Philosophy of Science Department of Economics, UZH	Suzann-Viola Renninger Lecturer
Fritz Studer AG	Michael Klotz Project Manager Machine and Grinding Technology Development
Institute of Virtual Manufacturing, D-MAVT, ETH Zürich	Pavel Hora Professor Pascal Fischer Doctoral Student

KOF Swiss Economic Institute ETH Zürich	Martin Wörter Head of Innovation Economics
Metoxit AG	Benedikt Seeber Head of R&D
Oerlikon Surface Solutions AG	Martin Rosatzin Head of Engineering and Portfolio Management
Panalpina Ltd.	Carlo Quirici Corporate Controller Logistics
Robotics and Philosophy Student Project ETH Zürich	Kaj Späth History and Philosophy of Knowledge Marin Aeschbach History and Philosophy of Knowledge Stephan Graf History and Philosophy of Knowledge
SAP (Schweiz) AG	Michael Schwarz Business Development Manager Discrete and Process Industry
SBB CFF FFS AG	James O'Neil Regional Head of Strategic Portfolio Management
SNV Swiss Association for Standardization	Barbara Mullis Standards Manager
Social Fabric GmbH	Heather Kirk Founder
Swisscom AG	Felix von Reischach Head of Artificial Intelligence and Machine Learning Claudiu Musat Research Director of Artificial Intelligence and Machine Learning
Technology and Society Laboratory EMPA St. Gallen	Roland Hischier Head of Advancing Life Cycle Assessment
Unia Zürich-Schaffhausen	Lorenz Keller Communication and Politics Responsible