

# 1<sup>ST</sup> EUROTECH PARTNER DAYS EPFL, LAUSANNE, SWITZERLAND **22-23 SEPTEMBER 2019**



**EPFL**



**TU/e** EINDHOVEN  
UNIVERSITY OF  
TECHNOLOGY

Technical  
University  
of Munich



# Welcome to the 2019 EuroTech Partner Days

Dear Guests,

On behalf of the EPFL Vice Presidency for Education, let me extend a very warm welcome to you for this first edition of the EuroTech Partner Days. As one of the EuroTech Alliance Members, it is an honor and pleasure for EPFL to host this event – co-organized with the five other members DTU, I'X, Technion, TU/e and TUM – in the framework of our school's 50<sup>th</sup> anniversary.

In a globalized world, partnerships are key to face complex and fast-paced challenges. The EuroTech Alliance builds on the complementary strengths of its partner universities to achieve joint multi-scale initiatives of high impact on society and industry. Education, as a key pillar of universities, is part of these joint efforts. Members strive on sharing experiences, learning from each other and jointly innovating to continuously improve their core mission of educating students and citizens of tomorrow's world.

With their Partner Days, the EuroTech Members enhance their collaboration in education by pulling their network and resources together to offer a platform for rich exchanges and discussions on international education with a focus on learning abroad opportunities.

The EPFL Education Outreach Team, together with the EuroTech partners, thank you for attending the EuroTech Partner Days and hope that you will enjoy this first edition.

**Dr. Sabrina Rami-Shojaei**

Education Outreach Department

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## SUNDAY 22 SEPTEMBER 2019

Time	Activity	Location
10:00-10:30	Welcome coffee & registration	MED Building
10:30-11:00	Presentation: EPFL landscape and the biggest challenges in education	MED Building
11:00-12:00	EPFL Campus tour	MED Building
12:00-13:00	Networking buffet lunch	MED Building
13:00-16:30	Visit of the Blue Brain Project at the EPFL Biotech Campus in Geneva <ul style="list-style-type: none"> <li>• Departure from EPFL to Geneva by bus</li> <li>• Visit of the Blue Brain Project</li> <li>• Return from Geneva to EPFL or to the Olympic Museum by bus</li> </ul>	BI Building
16:30-18:00	Free time or visit of the Olympic Museum in Lausanne	
18:00-22:00	Evening at the Olympic Museum: drinks and dinner	

## MONDAY 23 SEPTEMBER 2019

Time	Activity	Location
08:30-09:00	Welcome coffee	SV Building
09:00-11:30	Presentation of the EuroTech Universities Alliance Presentation of the EuroTech Universities*: <ul style="list-style-type: none"> <li>• Technical University of Denmark ( DTU)</li> <li>• École polytechnique (L'X)</li> <li>• Technion – Israel Institute of Technology (Technion)</li> <li>• Eindhoven University of Technology (TU/e)</li> <li>• Technical University of Munich (TUM)</li> </ul> Panel discussion including Q&A on: Strategic alliances for education	SV Building
11:30-12:00	Booth preparation and set up for the International Fair	Rolex Learning Center
12:00-14:00	International Fair	Rolex Learning Center
14:30-16:30	World Café: parallel workshops	Rolex Learning Center
17:00-18:30	EPFL demo: Venice Time Machine and Hyperloop	Datasquare Building
18:30-20:00	Farewell cocktail reception and poster fair based on World Café discussions	Rolex Learning Center

\* For more information on the speakers, please see page 4.  
EPFL will be presented on Sunday 22 September.

# Speakers



Technical University of Denmark (DTU)

**Prof. Philip John Binning**

Senior Vice President, Dean of Graduate Studies and International Affairs, DTU



École polytechnique fédérale de Lausanne (EPFL)

**Prof. Andreas Mortensen**

Vice President for Research, EPFL



École polytechnique fédérale de Lausanne (EPFL)

**Prof. Pierre Vanderghyest**

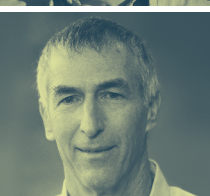
Vice President for Education, EPFL



École polytechnique (L'X)

**Prof. Benoît Deveaud**

Deputy Vice President for Academic Affairs and Research, L'X



Israel Institute of Technology (Technion)

**Prof. Adam Schwartz**

Senior Executive Vice President, Technion



Eindhoven University of Technology (TU/e)

**Prof. Lin-Lin Chen**

Director International Scientific Affairs, TU/e



Technical University of Munich (TUM)

**Dr. Hannemor Keidel**

Delegate officer for the strategic alliance EuroTech, TUM

# World Café Parallel Workshops

The World Café will be held on **Monday, 23 September 2019 – 14:30 - 16:30 at the Rolex Learning Center** and offers a creative way to share knowledge and explore key issues together. Small groups of 6-8 participants will be discussing an issue at a table, hosted by a EuroTech moderator. Every 20-30 minutes, the groups will switch tables and topics to continue and build up on the previous' group conversation. At the Farewell cocktail reception, the outcomes of the World Café discussions will be presented at a poster fair.

Over the course of the whole workshop you will have the possibility to discuss the following four topics:

**1. Is there a perfect model for student mobility: double degrees, exchange semesters, internships, short-term stays, virtual exchange projects etc.?**

Which format offers the best added value and optimal integration in a pedagogical project? What would be the conditions for win-win opportunities for students and institutions?

**2. Can international collaboration in education benefit from a strategic university alliance?**

How can collaboration in education be achieved? For instance by putting in place double/joint degrees, complementary curricula or coordinated programs? How to build fruitful student and staff mobility beyond the existing research cooperation? What is the added value for institutions, students and staff?

**3. How to boost a key mobility partnership, ensure reciprocity and exchange balance?**

There may be a high interest for students to do an exchange in certain universities whilst this interest may not always be reciprocal. How can we encourage students from these institutions to study abroad? How can we promote incoming mobility from these institutions? What promotion tool could be used (e.g. joint funding)?

**4. Strategic partnerships – widening horizons**

How to develop strategic partnerships to widen the horizons? Should we develop and foster partnerships with the local, private and public ecosystem or start-ups to provide for instance access to internships, placements in industrial and research partners or work on joint project with industrial support? How can we achieve that?

# About the EPFL Projects

## The EPFL Hyperloop Where Education Meets Innovation

EPFL's mission is to train talented engineers, architects and scientists, equipping them with skills and tools to shape the future. That is why EPFL also focuses on hands-on initiatives such as the Hyperloop project to enhance the drive to learn, create and collaborate. The diverse EPFL team, who took on this challenge on top of their regular studies, consists of passionate students from faculties covering domains such as engineering, design and business, mentored by renowned EPFL professors. This project fosters interdisciplinarity, innovation and collaboration between academia and the engineering industries. The two times the team participated in competitions, organized by Elon Musk's company SpaceX, they made it to the podium. The aim of these competitions is to prove the ability to innovate, alongside the best institutions and encourage reciprocal learning.



Hyperloop is the future and fifth form of transportation. A semi-levitating transportation capsule (Pod) traveling in a near vacuum tube (Hyperloop), catering to nearly 900 passengers an hour from the get-go, will shorten long-distance routes between cities and even countries.

The EPFL team, 2019 © EPFL

Sources:

EPFL Educational Initiatives

<https://www.epfl.ch/education/educational-initiatives/interdisciplinary-projects/epfloop/>

EPFL Annual Report 2018

<https://rapport-annuel.epfl.ch/en/2018/teaching/edito-teaching/>

## The EPFL Blue Brain Project A Bridge Between Research and Education

This project builds a bridge between research and education and shows how collaborative research contributes to learning: After years of theory and experimentation, simulation is the evolving next step in many sciences and engineering fields. Simulation neuroscience is fundamental to understanding the brain as a complex multi-scale system as it allows navigating through the brain at cell-scale and allows us to learn about the complexities of the brain in a more holistic way. For instance, in this framework, the online Blue Brain Cell Atlas tool was developed to allow the user to visualize all 737 brain regions of a mouse and the cells they contain. This great teaching aid allows the user to display just the regions of interest and navigate through these down to the scale of individual cells. It is a dynamic tool, which allows collaborative teaching, research and learning.

# About the EPFL Projects

## The Venice Time Machine

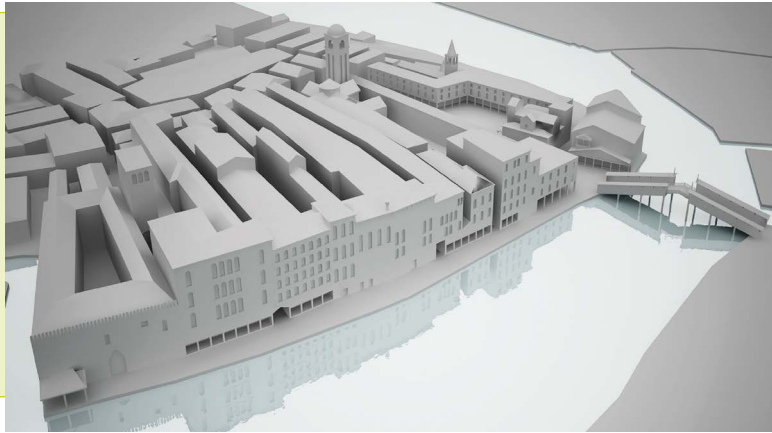
### A Historical Heritage Initiative for Education, Research and Economy

The Venetian archives reveal a thousand years of European circulations, offering new tools to study population and economical dynamics, linguistic evolution, disease spreading, and pattern migrations in the domains of visual arts, architecture and music. Whilst the individual study of these fields is important, studying their interconnections brings an additional dimension to the understanding of the evolution of a city to create a multidimensional model. This requires a variety of skills, backgrounds and disciplines ranging from science and engineering to arts and history to collaborate and integrate individual approaches. This project has laid the foundations for a larger, European-wide research and education project.

The Venice Time Machine project, launched in 2012, is a pioneer project in the field of international Digital Humanities. It aims to build a multidimensional model of Venice and its evolution.

3D reconstruction of the 16<sup>th</sup> century Rialto neighborhood in Venice.

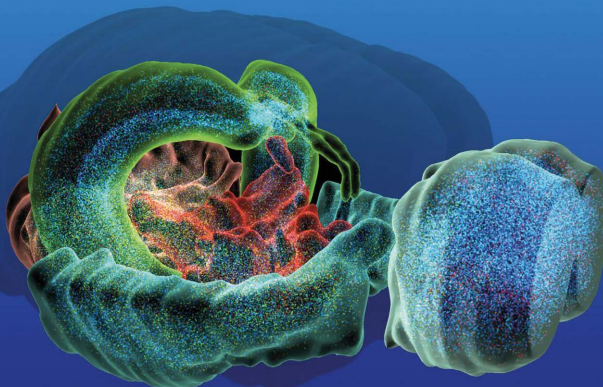
© DHLAB / EPFL, AMstudio, Venice



Source:

EPFL Annual Report 2018

<https://rapport-annuel.epfl.ch/en/2018/research/time-machine-in-the-running-to-become-a-fet-flagship/>



The Blue Brain Project is a Swiss brain research initiative led by founder and Director Professor Henry Markram. The aim of the BBP is to build biologically detailed, digital reconstructions and simulations of the rodent brain and, ultimately the human brain.

© Blue Brain Project, EPFL

Source: EPFL Blue Brain

<https://www.epfl.ch/research/domains/bluebrain/>

- You can access the interactive Campus map via the EPFL Campus App (on Google Play or the App Store).**