# **D-USYS Conference 2022**

# **Event Schedule**

# Tue, Jun 07, 2022

1:30 PM

# Welcome Address

② 1:30 PM - 1:45 PM, Jun 7

1:45 PM

# "Making Teaching Fun - For Both Sides of the Classroom."

② 1:45 PM - 2:10 PM, Jun 7

**▼** Speaker



#### Monika Maurhofer

Lecturer and research group leader

2:15 PM

# "Linking research to teaching for the benefit of students, researchers and science."

② 2:15 PM - 2:40 PM, Jun 7

**₹** Speaker



Nina Buchmann

IAS

2:45 PM

# "Teaching Data Science and Computational Competencies at D-USYS"

② 2:45 PM - 3:10 PM, Jun 7

Data science and computational competencies are of increasing importance for science and industry. Thus, we need to equip our graduates with these competencies. In our keynote, we provide an update about current developments in data science education at ETH (project Comp2) and in our department, highlight two practice examples, and show you how to easily include data science elements into your courses using Jupyter Notebooks.

#### **♥** Speakers



Anouk N'Guyen
Educational Developer
D-USYS



**Urs Brändle** ETH D-USYS Stab



Loïc Pellissier
ITES



**Doris Folini** ETH Zurich



Katrin Bentel

#### 3:10 PM

#### Coffee break

② 3:10 PM - 3:40 PM, Jun 7

#### 3:40 PM

# **Shaping Our Future Data Science Curriculum at D-USYS**

② 3:40 PM - 5:05 PM, Jun 7

Room "Wisshorn"

Many members of our department have rich experiences with data science in both research and teaching. In this breakout session, we will facilitate a fruitful exchange among lecturers involved in teaching computational competencies to shape our future data science curriculum. Additionally, we will offer you the possibility to explore options on how to include Jupyter Notebooks in your own teaching.

#### **▼** Speakers



**Anouk N'Guyen**Educational Developer
D-USYS



**Urs Brändle** ETH D-USYS Stab



Katrin Bentel
LET

# **Teaching Strategies For The New Normal**

② 3:40 PM - 5:05 PM, Jun 7

Room "Seehorn"

The Corona pandemic had a major impact on higher education. After a semester 'without many effects of Corona', the question now arises how teaching and learning at ETH Zurich in general and at D-UYSY in particular should look like in the future? In this workshop, we will discuss the advantages and disadvantages of different didactic concepts together, based on concrete courses taught by the participants.

#### Speaker



#### Benno Volk

Head of Curriculum & Faculty Development ETH Zurich

# **Learning Activities To Facilitate Crossdisciplinary Competences**

② 3:40 PM - 5:05 PM, Jun 7

Room "Schwarzhorn"

The ETH Talent project aims to promote a holistic set of competencies that students need to develop for their professional life and to act as responsible members of society. Beyond the subject- and method-specific competence domains, social and personal competencies are essential. The competencies ETH Zürich aims to foster are organized and described in the ETH Competence Framework. By integrating cross-disciplinary competencies into teaching activities, it aims to empower students to shape the development of their competencies. It is therefore important that teaching staff is aware of the cross-disciplinary competencies students develop in their classes.

In this workshop, you will reflect about your own teaching and the integration of cross-disciplinary competencies.

#### **▼** Speaker



#### Michèle Gemünden

Curriculum and Faculty Development ETH Zürich, LET

6:00 PM

## **Aperitif**

2 6:00 PM - 7:00 PM, Jun 7

Restaurant Monta, Hotel Grischa

7:00 PM

#### Dinner

② 7:00 PM - 10:00 PM, Jun 7

Restaurant Monta, Hotel Grischa

#### Wed, Jun 08, 2022

#### 8:45 AM

#### **COVID-19 Science Task Force Experience**

② 8:45 AM - 9:10 AM, Jun 8

The COVID-19 pandemic has put a spotlight on how science interacts with policy-making and with the society. It has shown how science can support political decision making and help find solutions, and has also revealed how tensions can arise between politics and science. I will report from my experiences in science policy advising during the COVID-19 pandemic in Switzerland. As a newcomer to the science policy interface, I was heading the Swiss COVID science task force for one year, until August 2021. Compared to similar groups in other countries, the Swiss task force was broad and large – covering a wide range of disciplines, and since most disciplines were represented by several experts, consisting of almost eighty scientists. This structure allowed addressing the impacts of the pandemic on society in an interdisciplinary manner, but also entailed difficulties of coordination and communication. I will summarize the challenges that we initially faced in the dialogue with politics and the administration, problems of mutual trust, mutual understanding, and a clear view on the different roles. Then I will describe how these problems could be solved, and discuss whether we can learn from these experiences for future interactions between science, policy and the society.

#### **♥** Speaker



#### Martin Ackermann

Professor IBP

#### 9:15 AM

# "Learning From Weather and Climate Science to Prepare For a Future Pandemic."

② 9:15 AM - 9:40 AM, Jun 8

**▼** Speaker



**Sebastian Schemm** 

IAC

#### 9:45 AM

# "Science Communication: New Challenges for a New Domain"

② 9:45 AM - 10:10 AM, Jun 8

#### **▼** Speaker



#### Mirko Bischofberger

Owner at Science-Studios.ch, Former Head of Communications, EPFL

#### 10:10 AM

#### Coffee break

② 10:10 AM - 10:40 AM, Jun 8

#### 10:40 AM

## **Climate Science & Policy Panel Discussion**

② 10:40 AM - 12:05 PM, Jun 8

This session pulls together a range of high-level actors in the Swiss climate policy scene, to consider the role that scientific evidence plays in policy decisions, and the strategies that scientists can take to best support effective policy-making. The panelists' current roles include those of elected politician, political coordinator of an advocacy organization, policy liasion on the Swiss Academies, climate scientist active in policy debates, and a scholar of science - society linkages.

#### **▼** Speakers



Philipp Wilhelm
Landammann (Mayor)

City of Davos



Sonia Seneviratne

ETH Zurich



#### Michèle Andermatt



Urs Neu

Proclim



Pius Krütli

TDLab



**Tony Patt** 

Professor of Climate Policy

IED

12:15 PM

#### Lunch

② 12:15 PM - 1:45 PM, Jun 8

#### 1:45 PM

# Ressources at D-USYS | Competence Centers (WFSC, GDC, PSC, AI, ESC, CFSM, C2SM)

② 1:45 PM - 2:10 PM, Jun 8

#### **▼** Speakers



Ivonne Blossfeld

World Food System Center



Sebastian Schemm

IAC



# Michele Volpi

Lead Data Scientist Swiss Data Science Center, ETH Zurich / EPFL



#### Melanie Paschke

PSC



**Tony Patt** 

Professor of Climate Policy



Nicolas Gruber

Professor ETH Zurich

# 2:15 PM

# Ressources at D-USYS | VMUSYS

② 2:15 PM - 2:40 PM, Jun 8

## **♥** Speakers



Kathryn Platt



Morgan Vallières

IBF

# 2:45 PM

# Ressources at D-USYS | Departmental Services

② 2:45 PM - 3:10 PM, Jun 8

Departmental Services @ D-USYS:

A short introduction into the services and members of our team.

# **₹** Speaker



Sabine Urban-Meens

Co-Head

ETH Zurich, Departmental Services D-USYS

3:10 PM

# Leisure Activity | Hike to Schatzalp for Coffee & Cake

② 3:10 PM - 6:00 PM, Jun 8

7:00 PM

# **Aperitif & Conference Dinner**

② 7:00 PM - 11:00 PM, Jun 8

Restaurant Monta, Hotel Grischa

# Thu, Jun 09, 2022

8:45 AM

# Addressing Meteorological Risks with a Digital Twin

② 8:45 AM - 9:10 AM, Jun 9

**▼** Speaker



**David Bresch** 

IEI

9:15 AM

# How can transdisciplinary research contribute to sustainable development? An illustration based on the transdisciplinary research for development project RUNRES

② 9:15 AM - 9:40 AM, Jun 9

**♥** Speaker



Rea Pärli

PhD student IED, IAS

9:45 AM

# "Measuring environmental impacts of anthropogenic particles: nano- and microplastics."

② 9:45 AM - 10:10 AM, Jun 9

**♥** Speaker



**Denise Mitrano** 

IBI

10:10 AM

# Coffee break

② 10:10 AM - 10:40 AM, Jun 9

10:40 AM

Panel Session "Science Spinoffs"

Moderated by Niki Gruber

#### **♥** Speakers



Nathalie Casas Head of Technology Climeworks



Clara Rowe CEO Restor



**Urs Dieterich**Managing Director, Landscape Resilience Fund
South Pole



Patrick Rühs
Head of Science
Planted Foods ag



**Nicolas Gruber** Professor ETH Zurich

12:15 PM

# **Lunch & End of Conference**

② 12:15 PM - 1:45 PM, Jun 9