



Advancing Technology  
for Humanity

Wednesday, December 15th, 2021, 2PM to 5PM

# IEEE WORKSHOP

IEEE Industrial Electronics Society - IEEE Power Systems Society - IEEE Control Systems Society

Swiss Chapters' co-hosted Virtual Event on:

## Control Platforms, Tools & Innovations for the Energy Transition

### WELCOME AND INTRODUCTION

14:00

-

14:15

- Dr. Luca Dalessandro, ETIX GmbH, Chairman IES Chapter, Vice-Chair IEEE Switzerland
- Dr. Silvia Bardi, Vice Chair PES Chapter
- Prof. Giancarlo Ferrari Trecate, EPFL, Chairman CSS Chapter

### PRESENTATIONS

14:15

-

15:00

IES1	<p><i>"Hoping for a miracle is not strategy: Some facts about the climate crises and what we can still do about it".</i></p> <ul style="list-style-type: none"><li>▸ Prof. Henrik Nordborg, OST</li></ul>
IES2	<p><i>"Research Platforms for the Energy Transition at ETH Zurich: ReMaP, Nexus-e, PATHFNDR".</i></p> <ul style="list-style-type: none"><li>▸ Dr. Christian Schaffner, Energy Science Center, ETH Zurich</li></ul>
IES3	<p><i>"Electric Vehicle performance and range estimation: how system simulation supports innovation".</i></p> <ul style="list-style-type: none"><li>▸ Mr. Lionel Broglia, Siemens Digital Industries Software</li></ul>

15:00

-

15:45

PES1	<p><i>"Bringing AI to the edge – a federated machine learning simulation environment for load curve prediction on smart meters".</i></p> <ul style="list-style-type: none"><li>▸ Dr. Severin Nowak, HSLU</li></ul>
PES2	<p><i>"Accelerating the energy transition using digital twin and hardware-in-the-loop".</i></p> <ul style="list-style-type: none"><li>▸ Dr. Nikola Fischer Celanovic, Typhoon-HIL GmbH</li></ul>
PES3	<p><i>"Digital twin and application of AI in distribution grids".</i></p> <ul style="list-style-type: none"><li>▸ Prof. Bozorg Mokhtar, HEIG-VD</li></ul>

15:45

-

16:30

CSS1	<p><i>"Benchmarking control developments in energy and buildings with NEST, an open district size living lab".</i></p> <ul style="list-style-type: none"><li>▸ Mr. Philipp Heer, EMPA</li></ul>
CSS2	<p><i>"Vision of a Swiss innovation platform for automatic control in the energy transition".</i></p> <ul style="list-style-type: none"><li>▸ Mr. Benjamin Sawicki, NCCR Automation, ETH Zurich</li></ul>
CSS3	<p><i>"Innovation to reduce the environmental impact of HV transmission lines: high-efficiency pressurized air cable technology".</i></p> <ul style="list-style-type: none"><li>▸ Dr. Walter Holaus, Hivoduct AG</li></ul>

### PANEL DISCUSSION WITH SPEAKERS - Q&A

16:30

-

17:00

Moderator: Dr. Luca Dalessandro

Program & Registration

<https://events.vtools.ieee.org/m/291695>

Join the Virtual Event

(Zoom)

<https://hslu.zoom.us/s/66157053428>



Swiss Chapter



Power & Energy Society®