



Center for Sustainable Future Mobility ODTP Technical workshop

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Center for Sustainable Future Mobility

Objectives:

- **Connect research** groups with complementary competences active in the field of sustainable mobility
- Facilitate **knowledge transfer** between different stakeholders
- Foster the **cooperation** with industry / business / federal administration offices

 Prof. A. Bardow Energy and Process System Engineering	 Prof. J. Kolar Power Electronic Systems	 Prof. Aldo Steinfeld Renewable Energy Carriers	 Dr. A. Kouvelas Traffic Engineering	 Prof. F. Yu Visual Intelligence and Systems	 Prof. T. Bernauer International Environmental Policy
 Dr. Miriam Elser Vehicle Systems EMPA	 Prof. M. Lukatskaya Electrochemical Energy Systems	 Prof. E. Frazzoli Dynamic Systems and Control	 Prof. M. Raubal Geoinformation Engineering	 Prof. B. Adey Infrastructure Management	 Prof. M. Filippini Energy and Public Economics
 Prof. P. Ermanni Lightweight Systems	 Prof. M. Mazzotti Carbon Capture and Storage	 Prof. M. Hutter Robotics and Intelligent Systems	 Prof. F. Dörfler Institute for Automation	 Prof. E. Chatzi Structural Mechanics and Monitoring	 Prof. V. Hoffmann Sustainability and Technology
 Prof. C. Frank High Voltage Engineering	 Prof. R. McKenna Laboratory for Energy Systems Analysis	 Prof. R. Siegwart Autonomous Systems Lab	 Prof. J. Lygeros Automatic Control Lab	 Prof. I. Hajnsek Remote Sensing	 Prof. A. Patt Climate Policy
 Prof. U. Grossner Advanced Power Semiconductors	 Prof. N. Noiray Power and Propulsion Systems				 Prof. T. Schmidt Energy Policy
 Prof. S. Hellweg Environmental Impact	 Prof. C. Onder Dynamic Systems and Control	 Prof. K.W. Axhausen Traffic Planning, Transport Modelling	 Prof. M. Pollefeys Institute for Visual Computing	 Prof. D. Kaufmann Urban Planning	 Prof. M. Stauffacher Science – Society Interface
 Prof. G. Hug Electric Power Systems	 Prof. T. Schmidt Electrochemistry	 Prof. F. Corman Transport Systems	 Prof. S. Tang Computer Vision and Learning	 Prof. K. Schindler Photogrammetry and Remote Sensing	 Prof. B. Steffen Climate Finances and Policy

Energy efficiency,
e-mobility and batteries

Autonomous driving
and robotics

Traffic and
transportation systems

Connected car, security,
control, vision, and
automation

Infrastructure,
maintenance, logistics,
and built environment

Policy and economics

Center for Sustainable Future Mobility

Main activities



Knowledge transfer events



Mobility Initiative Research Program



Digital Twin Platform for Mobility

Digital Twin Platform for Mobility

Timeline



- July 2021: Project approved by the ETH Research commission
- **July 2022**: 1st dedicated scientist join the team
- From **March 2023**: 3 additional positions secured for 2023-2024 by a joint proposal with **Swiss Data Science Center (SDSC)**, funded by swissuniversities

The Team



Chenyu Zuo, ODTP-Virtual environment (Visualization expert)



Stefan Ivanovic, ODTP-Physical and Data environment



Jascha Grübel, ODTP – Conceptualization and architecture and standards



Milos Balac, CSFM – DT Scientific lead



Carlos Vivar Rios, Main ODTP developer



Sabrina Ossey, Data privacy



Robin M. Franken, Data ontology

