

Lucerne University of  
Applied Sciences and Arts

# HOCHSCHULE LUZERN

Engineering and Architecture  
FH Zentralschweiz

## Facade 2021 – Digital! Conference on Building Envelopes

Friday, 26<sup>th</sup> November 2021  
KKL Lucerne and online

Registration and further information:  
[www.hslu.ch/facade2021](http://www.hslu.ch/facade2021)



# Facade 2021 – Digital!

**Date**

Friday, 26th November 2021

**Location**

KKL Lucerne and online

**Conference language**

English

**Organisation**

Competence Center  
for Building Envelopes and  
Civil Engineering  
Prof. Dr. Andreas Luible  
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**Registration fee**

Conference Pass KKL:  
CHF 350.–  
Conferencepass KKL for  
Students/HSLU-/EFN-/  
COST-members: 100.–  
Conference Pass Online:  
CHF 50.–

**Registration**

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**Facade 2021 – Digital!**

The international “Facade 2021 – Digital!” conference will take place in Switzerland for the sixth time. It is organized by the Competence Center for Building Envelopes and Civil Engineering of the Lucerne School of Engineering and Architecture in collaboration with the Swiss Center for Windows and Facades (SZFF). On this platform, internationally renowned engineers and architects will present the latest trends, developments and technologies as well as innovative building envelope projects.

The motto of this year’s conference is “Digital!” and dedicated to the following topics:

- Digitalization from design to execution
- Innovation through digitalization
- Facade design and circularity
- Machine learning for reuse of materials
- Innovations in daylighting and light redirecting

The conference takes place in the framework of the European Facade Network (EFN), in which universities and industry have joined forces for the transfer of knowledge on the subject of building envelopes.

## Program

8.30–9:15

### Registration and coffee

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9:15–9:30

### Opening

Andreas Luible, Head of Competence Center for Building Envelopes and Civil Engineering, Lucerne School of Engineering and Architecture, Horw (CH)

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9.30–11:00

### Session 1: Digitalisation – Design to Execution

- Gerhard Bosch, Hermann + Bosch Architekten GbR, Stuttgart (D)  
Florian Gauss, Thimeo Fildhuth, Julian Länge, Knippers Helbig GmbH, Stuttgart (D)  
Elephant's world at the Wilhelma Stuttgart: Parametric design of a long span timber grid shell
  - Michael Bühler, Josef Gartner Switzerland AG, Arlesheim (CH)  
Permasteelisa Industry 4.0 Process Approach
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11:00–11:30

### Coffee break

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11:30–12:30

### Session 2: Digitalisation – Innovation

- Valentin Spiess, i-Art, Basel (CH)  
New Ways of Media Integration for Building Envelopes
  - Valeria Piccioni, Ina Cheibas, Matthias Leschok, ETHZ – NCCR Digital Fabrication, Zürich (CH)  
Performance Integrated 3D Printed Facade
  - Raul Corrales, BIFF SA, Lausanne (CH)  
BIFF – Building Facades Innovation Challenge
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12:30–13:30

### Lunch break

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13:30–15:00

### Session 3: Smart approaches to sustainability

- Linda Hildebrand, RWTH Aachen, Aachen (D)  
Circularity in facade design
  - Catherine De Wolf, Deepika Raghu, ETHZ, Zürich (CH)  
Digitalization towards the reuse of façade components
  - Raphael Markstaller, BOXS AG, Gränichen (CH)  
Plastic waste for affordable building material – a circular solution
  - Tobias Nolte, Leibniz Universität Hannover, Hannover (D)  
Machine Vision and Design
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15:00–15:30

### Coffee break

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15:30–16:30

### Session 4: Daylight and Facade

- Xiaoming Yang, Foster + Partners, London (UK)  
The lighting design process: from digital tools to site commissioning
  - André Kostro, Development of a transparent light redirecting film for windows
  - Stephen Wasilewski, Lars O. Grobe, Lucerne School of Engineering and Architecture, Horw (CH), Modelling daylight in buildings
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16:30–17:00

### Closing

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17:00

### Apéro

## **Registration and further information**

Lucerne School of Engineering and Architecture  
Competence Center for Building Envelopes and  
Civil Engineering  
Technikumstrasse 21, CH-6048 Horw

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