

Teachyverse: Collaborative E-Learning in Virtual Reality Lecture Halls

Karola Marky, Florian Müller, Markus Funk, Alexander Geiß, Sebastian Günther, Martin Schmitz, Jan Riemann, and Max Mühlhäuser.

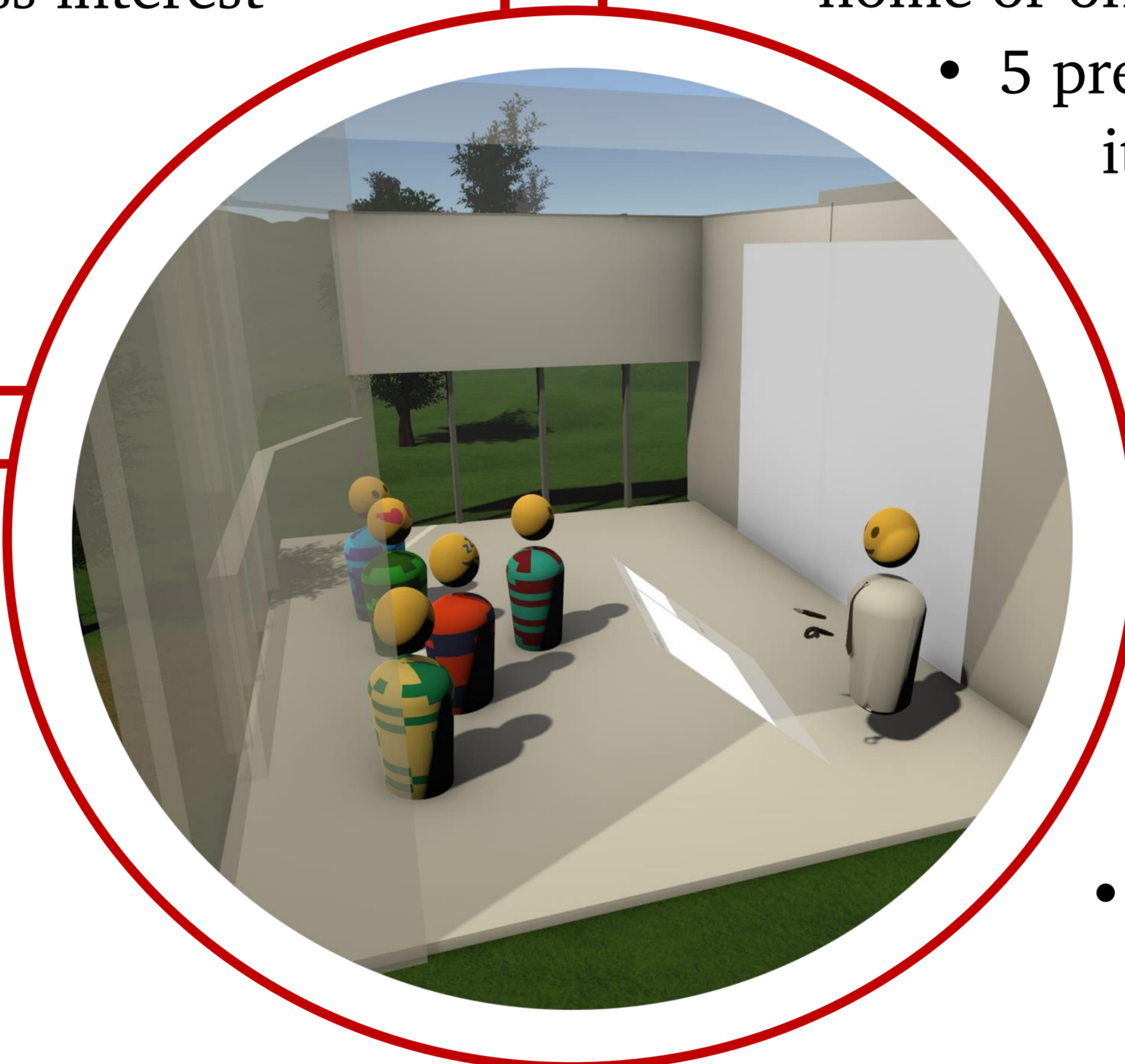
We propose Teachyverse, an immersive VR lecture hall that combines e-learning, traditional learning, and remote collaboration. Teachyverse immerses the lecturer and students in a virtual lecture hall. Our proof-of-concept study shows that students perceive it as fun and would like to use Teachyverse as a further E-Learning option.

Concept

- Students and lecturers meet for lectures in VR
- Remote usage possible
- Avatars represent each person
- Selectable facial expressions to express interest
- Communication through voice chat
- Recording for re-watching

Proof-of-Concept Study

- 30 students attended (3 remote)
- open discussion and questionnaires
- students would like to use Teachyverse from home or off campus
 - 5 preferred it over video recordings, because it closely resembles a real lecture
 - students wish for more complex presentations of materials, such as 3D

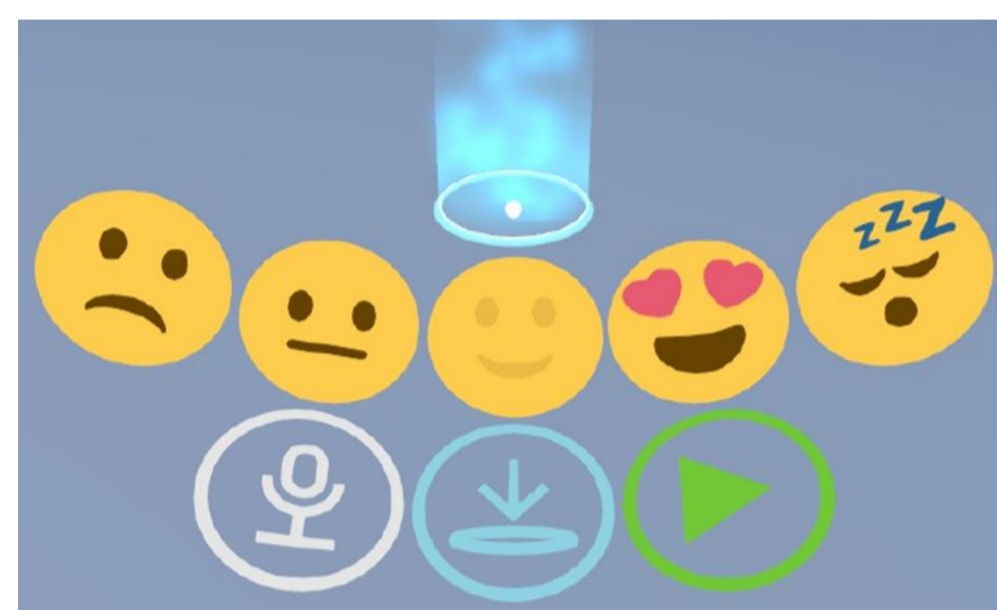


Students

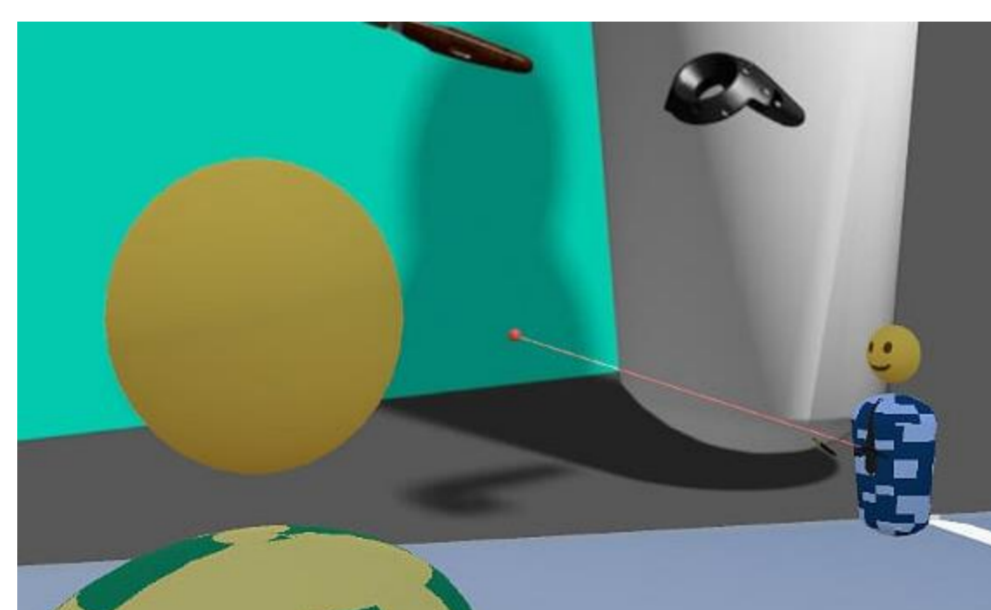
- can choose their position via teleport
- choose their facial expressions
- control voice chat options

Lecturer

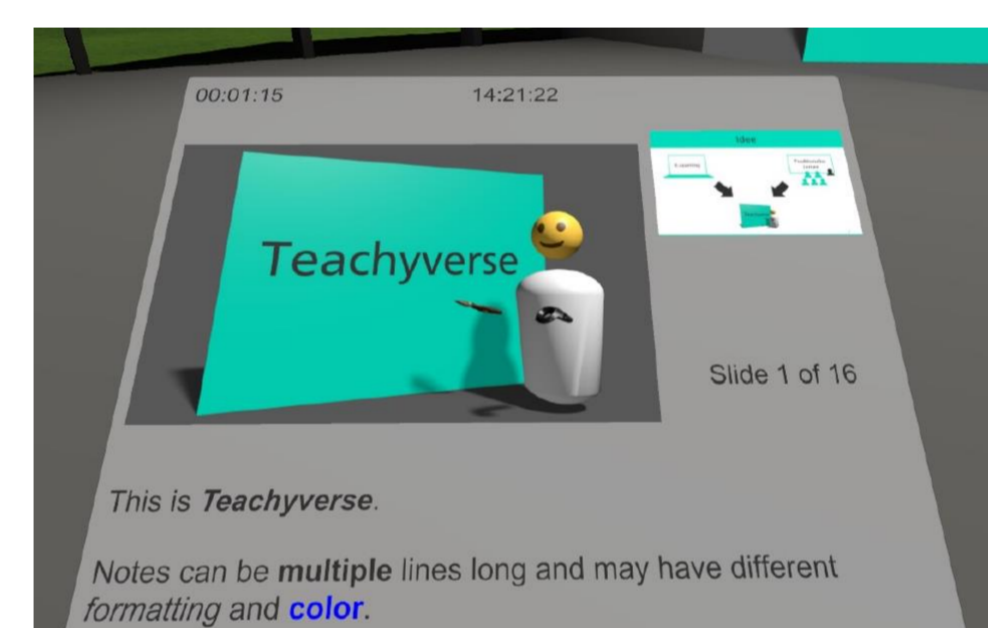
- has own presenter view
- controls recording
- has different tools



Student Menu



Presentation Screen



Presenter View



Tools for the lecturer



Contact: geiss@tk.tu-darmstadt.de