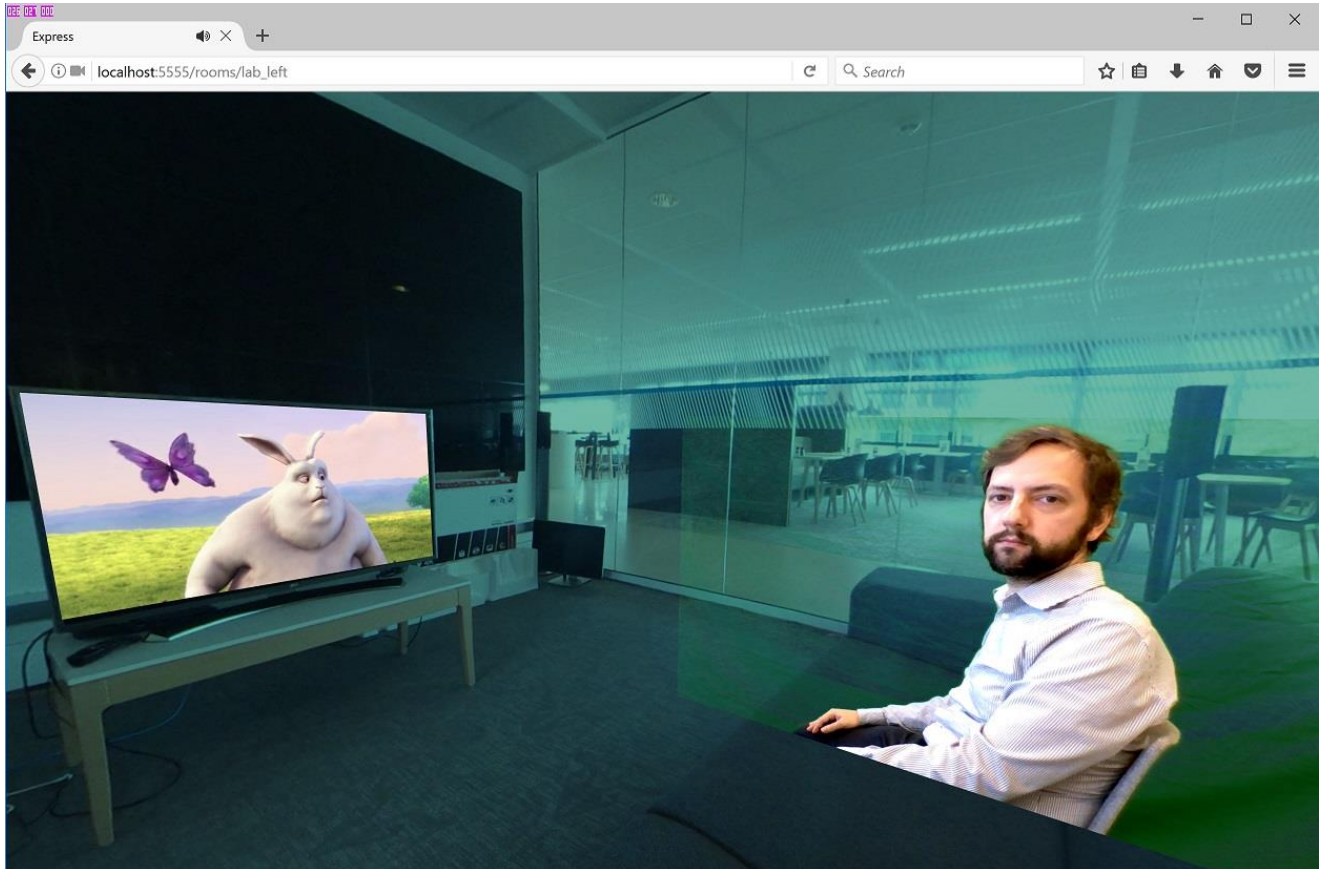


The background of the slide features two skydivers in silhouette, floating horizontally against a bright orange and yellow sunset sky. The skydiver on the left is on the left side of the frame, and the one on the right is on the right side. The overall scene is a high-contrast, dramatic image of skydiving.

MULTIMEDIA & MULTI-USER VR

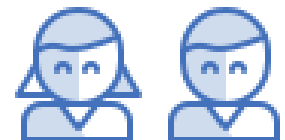
Simon Gunkel

TNO innovation
for life



PEOPLE

- › How to engage people while letting them interact in 360/3d space?
- › How to position people?
- › Interaction with environment and media objects?



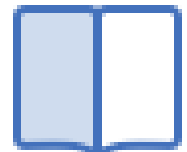
MULTIMEDIA OBJECTS

- › Synchronization
- › Dash streaming and tiling
- › Adaptation of spatial audio



BROWSER

- › Different browser support of webvr
- › Different browser support of Spatial audio
- › Performance of JavaScript and webgl



CONCLUSION

- › VR allows “natural” interaction between users
- › Performance still not good enough
- › Metadata: position and syncing of users and objects
- › No unified user interfaces and user interaction