



rijksuniversiteit  
 groningen



# 3D Theater at University of Groningen

Gert-Jan Verheij

# Overview:

Shape building for 3D Theatre and Cave

Equipment Specs

Didactical use VR Apps and 3D Theater in new model



# 3D Theater

- Curved
- Opening angle 135°
- 19 seats + 6 stands
- diameter 7.30 meters
- Pixels 4910 width by 1748 height
- 6 NH-12 Barco projectors 120Hz
  
- OSG Viewer (Own written viewer)
- Unreal ndisplay
- NVIDIA RTX™ 6000 Ada Generation
- 2x Datapath FX4HDR





# Cave (closed in 2020)

2,5 m<sup>3</sup>

3 walls and floor

Optical tracking

8 Barco projectors

OSG Viewer/ Linux cluster



# New didactical model for HMD and 3D Theater

Step 1: Develop a model on a HMD

Step 2: Present your model to your peers  
students





# Rebuild your Archeological site

Large

Slab

Medium

Schist

Small

Conglomerate

Other

RUG



3D Theater & HP Reverb













# Our Team visualisation

- Specialized in creating XR applications for research and education.
- Customized XR solutions for our researchers and educators.
- We use **Unreal Engine** for most of our applications.
- We develop for HTC Vive, Meta Quest pro/3 for Business, Zspace, Hololens2 and our 3d Theatre for 25 persons (19 sits and 6 stands).
- 3 developers, a Visual Artist and an Instrumentation Technologist/Project Manager/Lead





# Questions? [Realitycenter@rug.nl](mailto:Realitycenter@rug.nl)



December 5th 10.30-14.00 XRHUB RUG