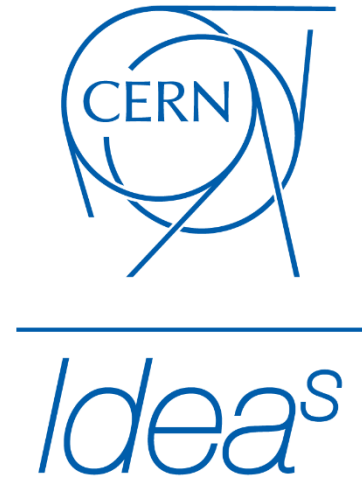
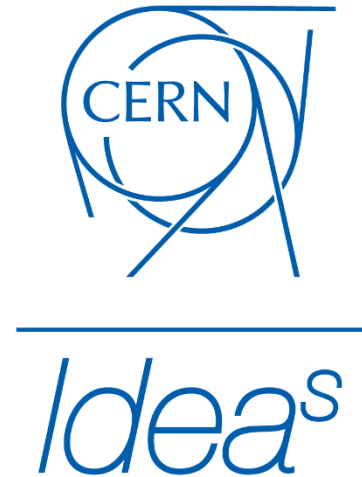


# Prototyping activities at IdeaSquare



# Collaboration with CERN projects





CERN Linear Electron Accelerator for Research

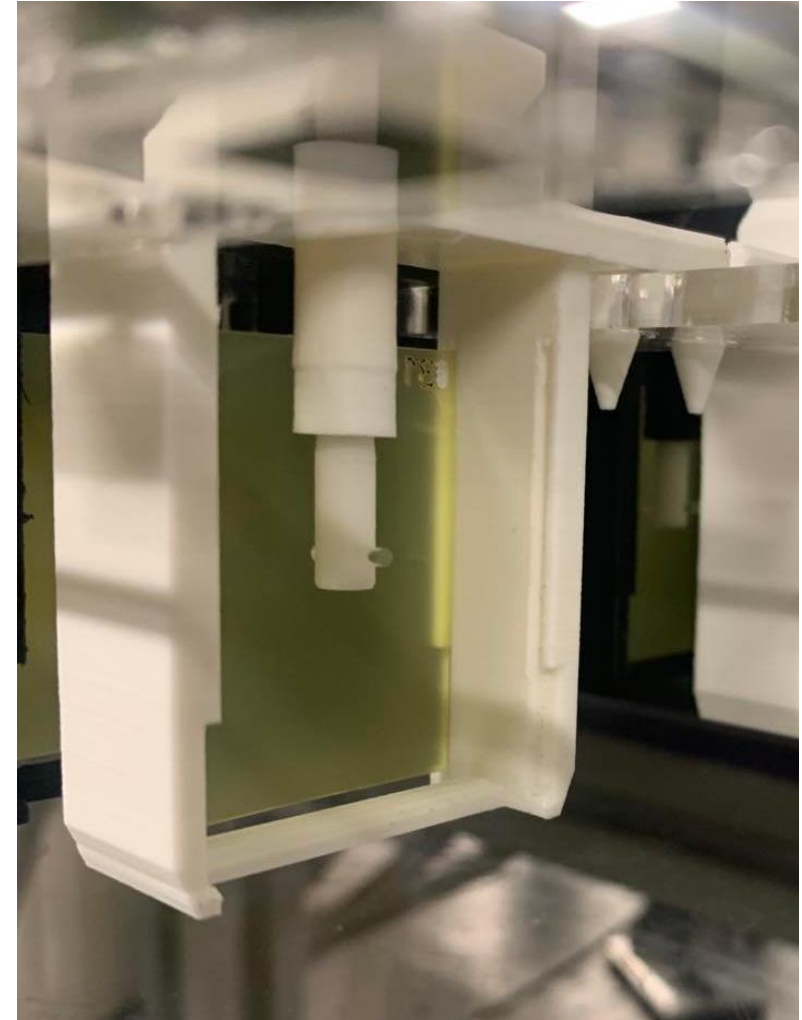
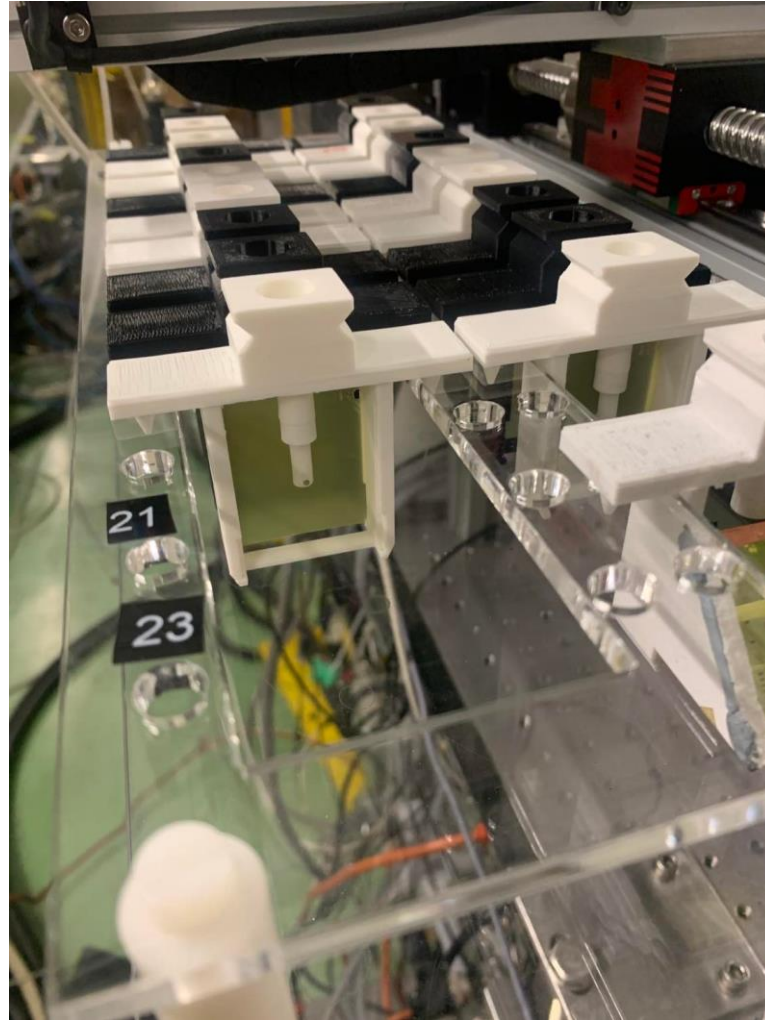
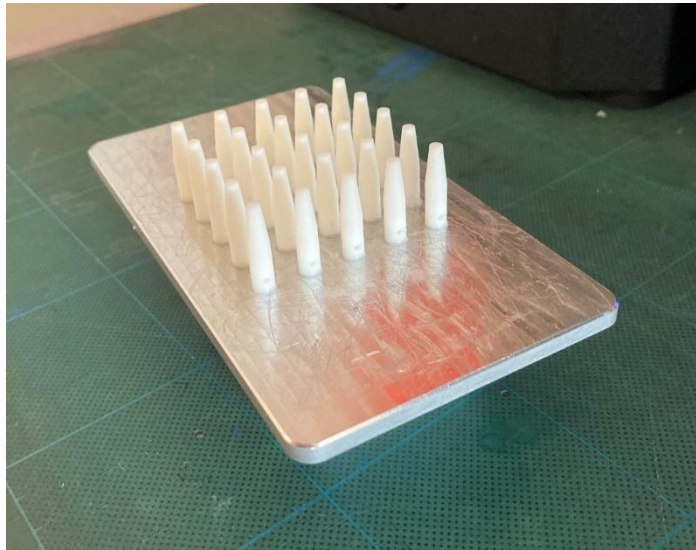
Medical research in radio therapy

Developed a robot for handling samples while the beam is running



# clear

3D printing  
Laser cutting

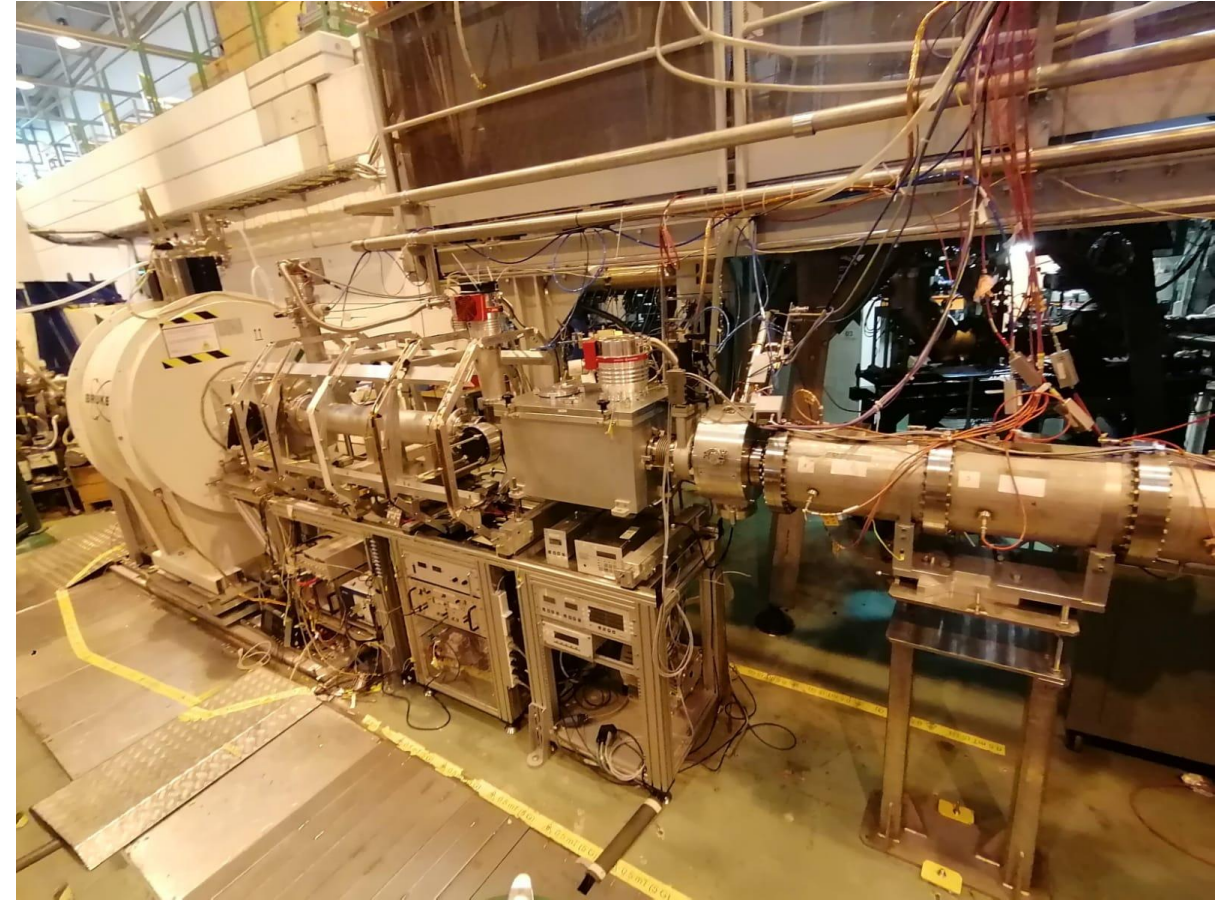




Isotope Separator On Line Device

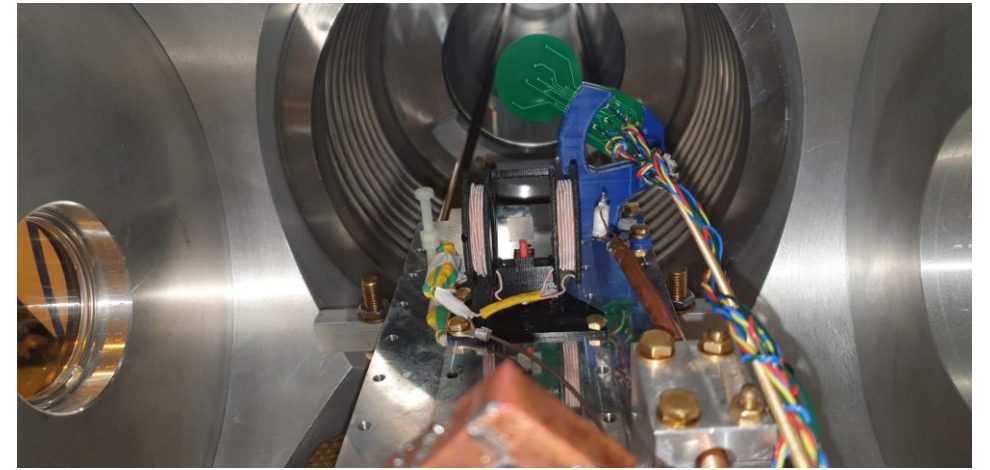
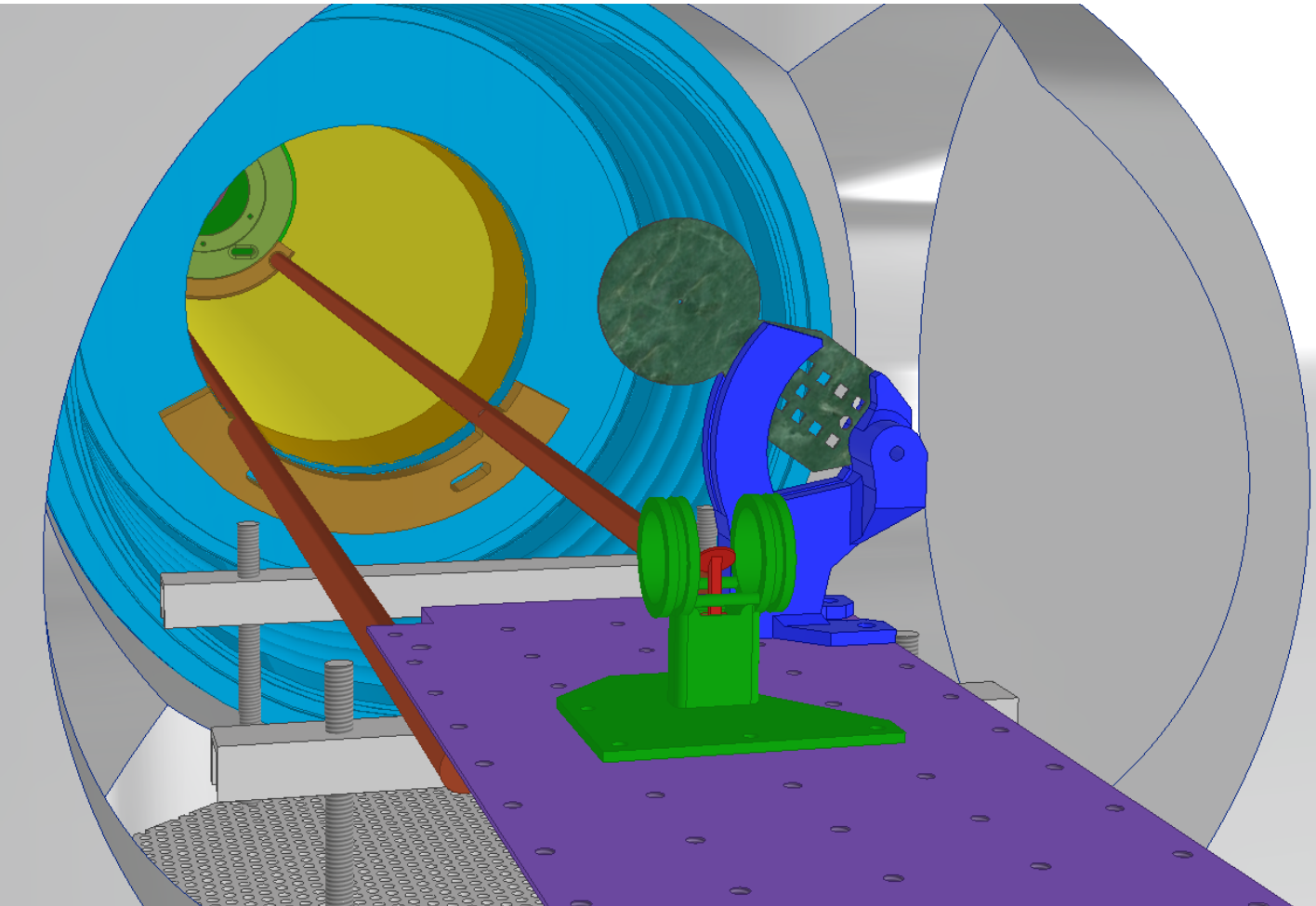
VITO beam line

Studies weak force and  
short-lived unstable nuclei



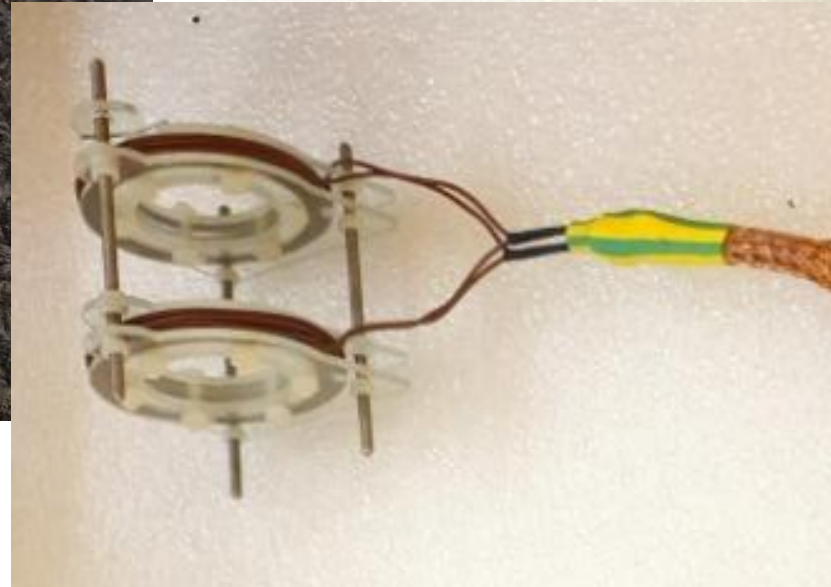
# 3D-printing in Idea Square for VITO

- Faraday Cup Holder (blue)
- RF-coil Frame (green)
- Sample Carrier (red)



# Waterjet Cutting in Idea Square for VITO - glass

As RF-coil frame printed of PLA-plastic were melted by RF-currents the frame has been re-designed to built it of glass slices made on Wazer machine in IdeaSquare



# Waterjet Cutting in Idea Square for VITO - brass

Strong magnetic field of few Tesla in around the NMR magnet didn't allow us to use a standard tools made of magnetic steel.

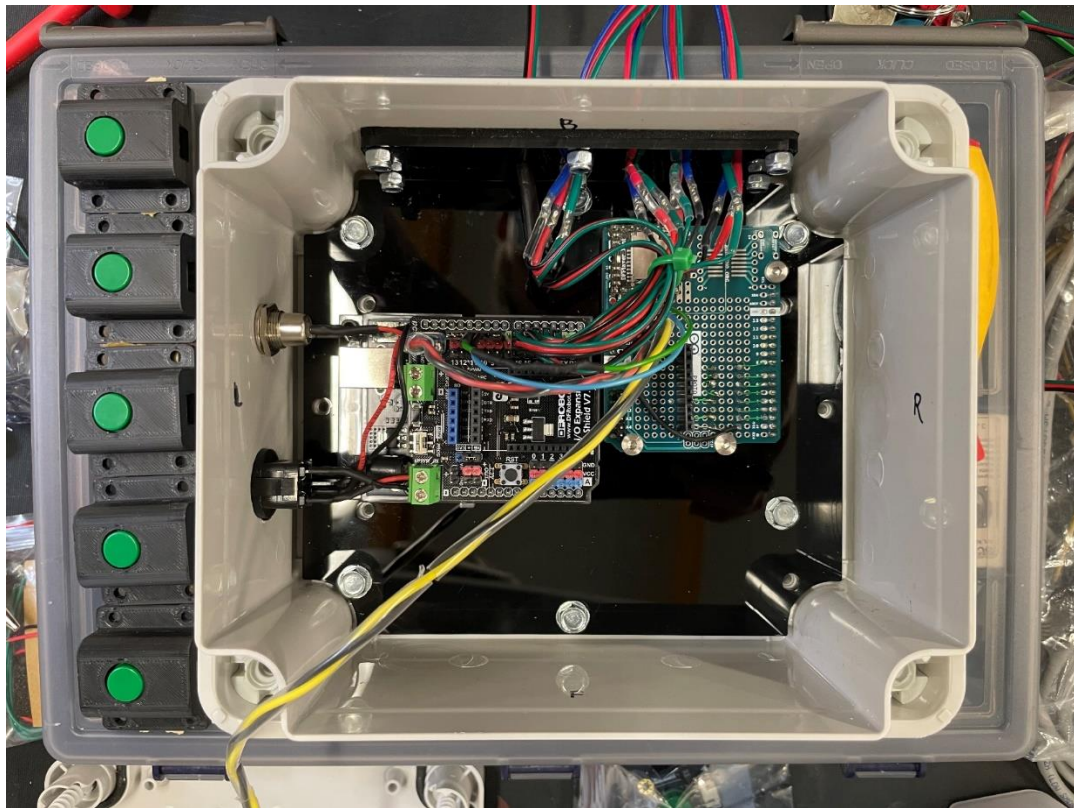
A set of custom brass wrenches to work on experimental carriage has been done by a cutting of brass sheet on a Wazer machine in IdeaSquare





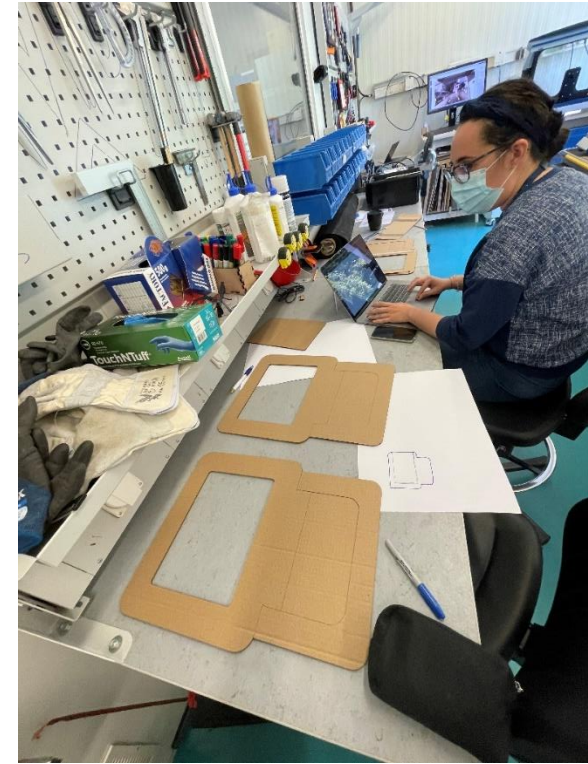


# CERN Science Gateway

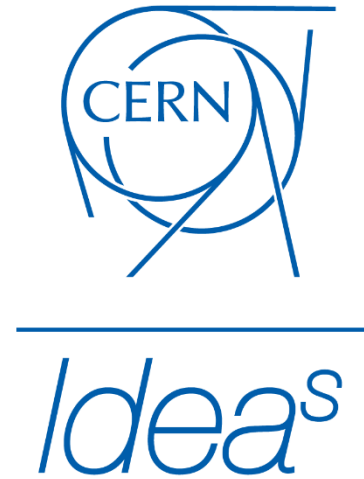




# CERN Science Gateway



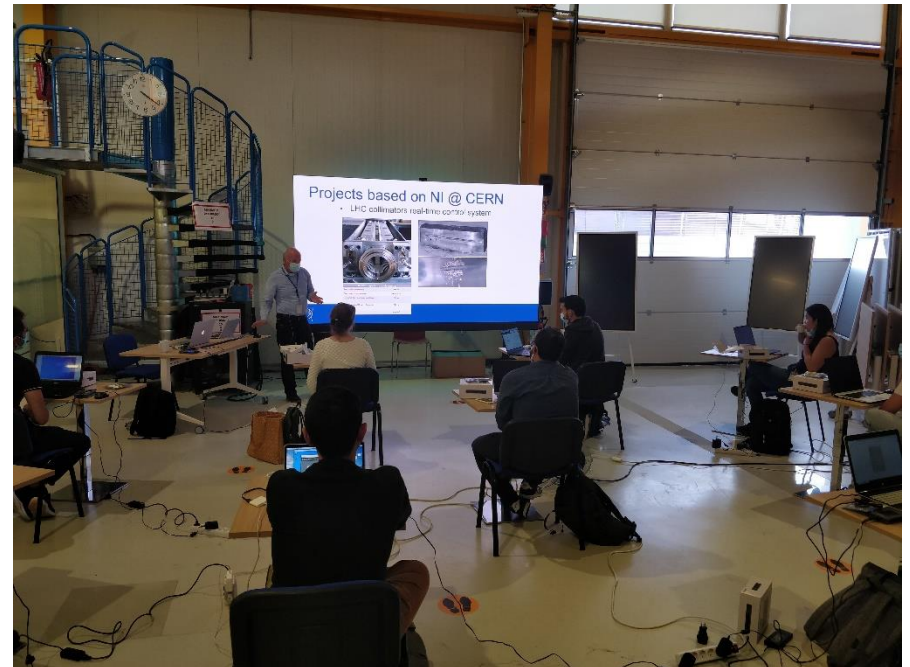
# Workshops at IdeaSquare



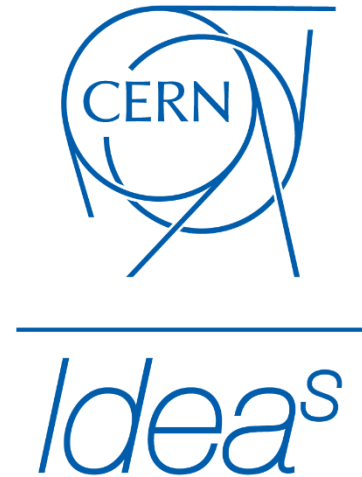
# FPGA Programming Using LabVIEW hands-on workshop

With the help of Adriaan Rijllart

- 2x 2hrs, open to all CERN personnel
- June (digital)
- October
- November
- 30+ attendees in total



# Student programs



# Student programs



# Crowd4SDG

- January 2021
- December 2021
  
- Prototyping workshop
- Following up teams in their prototyping work
  
- Prepared a system for shipping prototype materials to students abroad

# Student programs



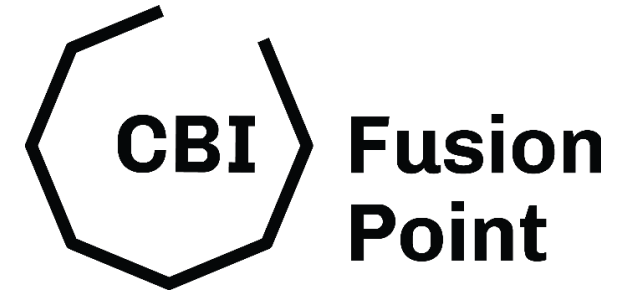
- Prototyping workshop
- Following up teams in their prototyping work
- Participating in Demo Day
- Planning of next year's course

# Student programs

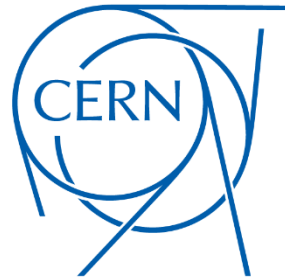




# Student programs



# New and updated equipment



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*Idea<sup>s</sup>*

# New and updated equipment



WAZER



EinScan Pro 2X 2020



Formlabs Form 3



Ultimaker S5 Pro Bundle



Oculus Quest 2



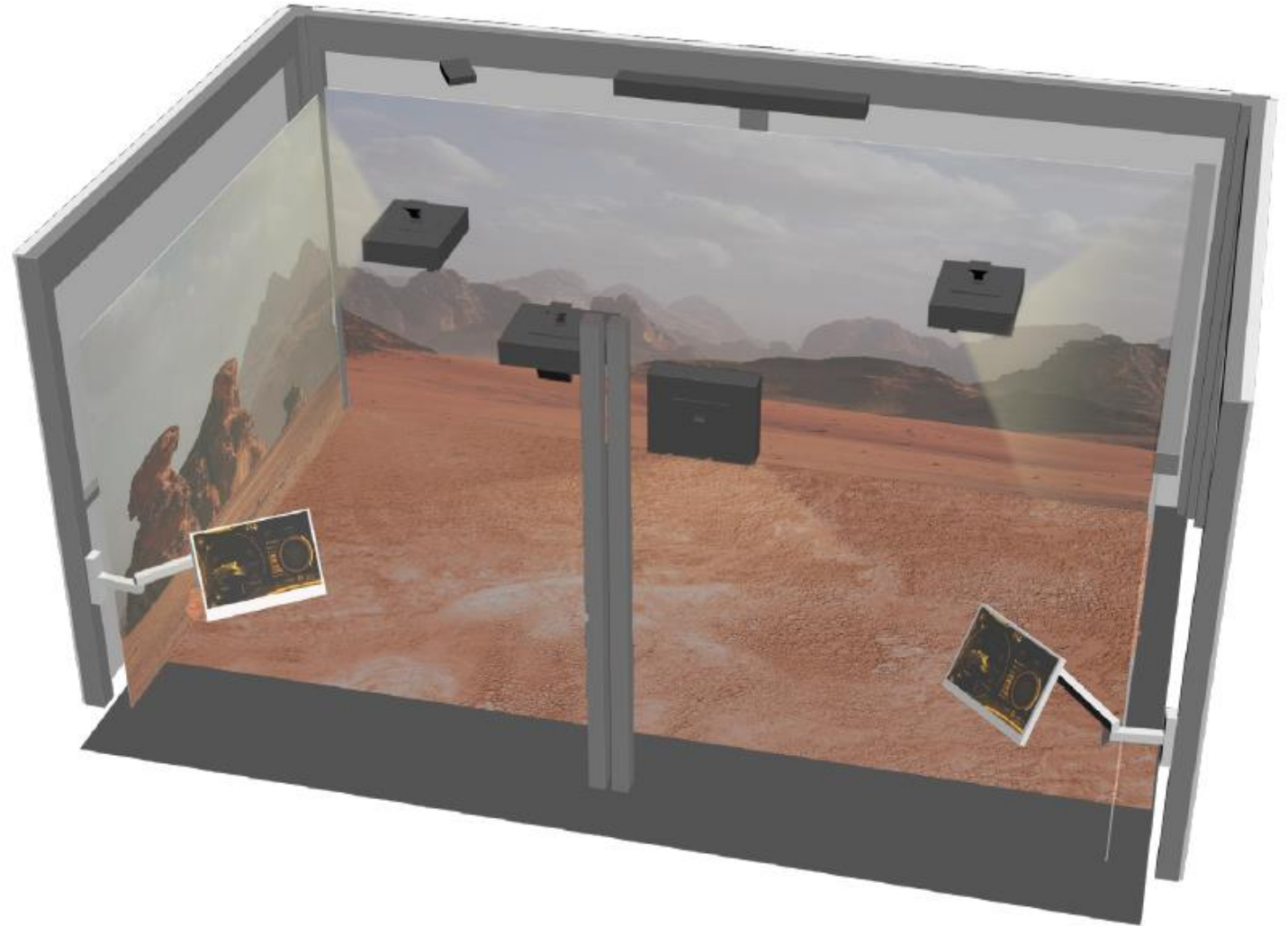
Roland GS-24

# HOLODECK ROOM

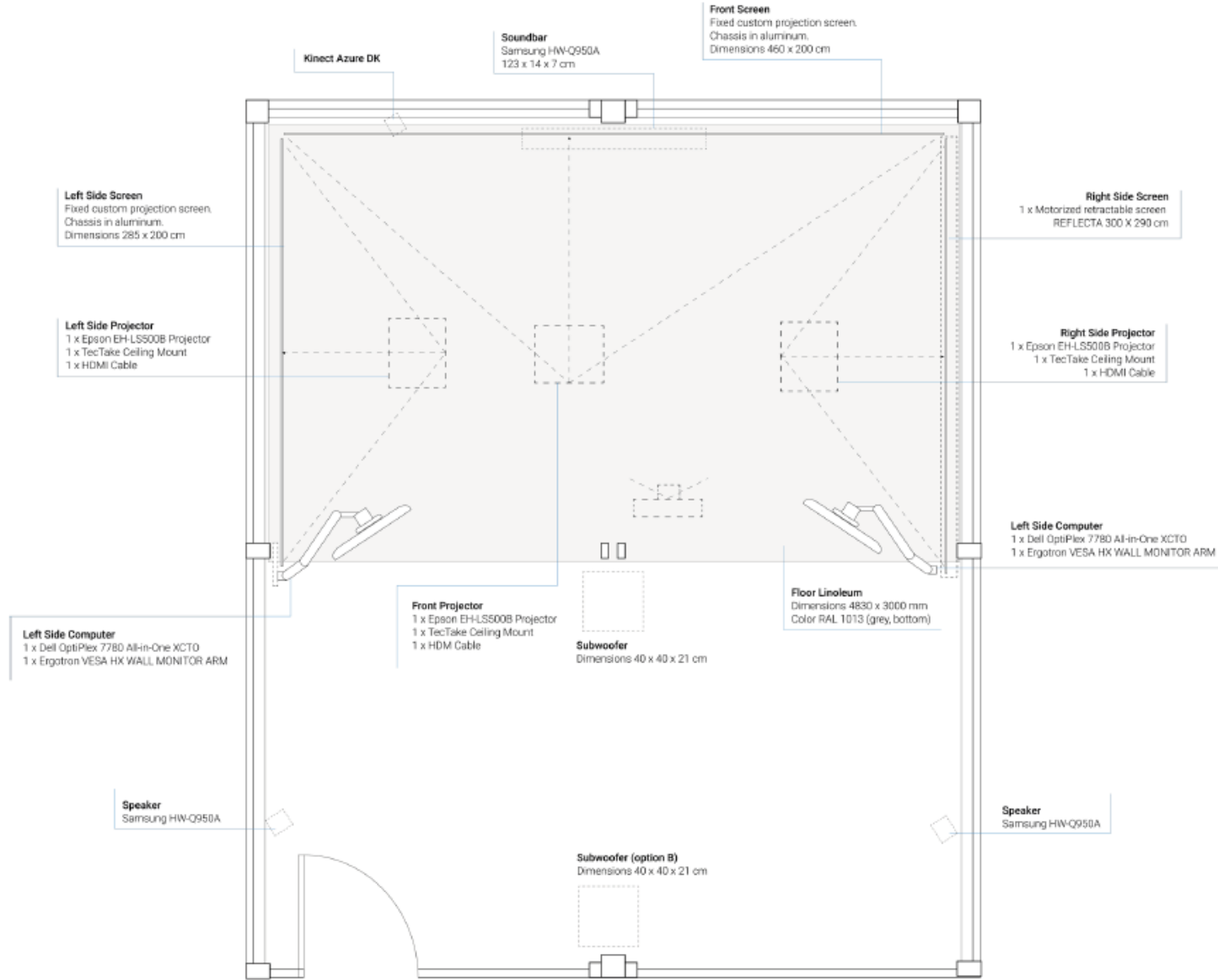
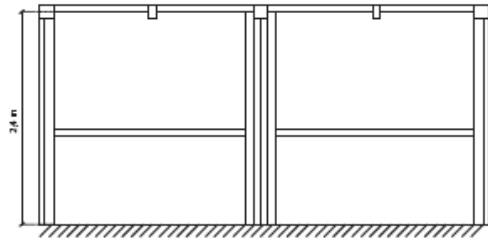
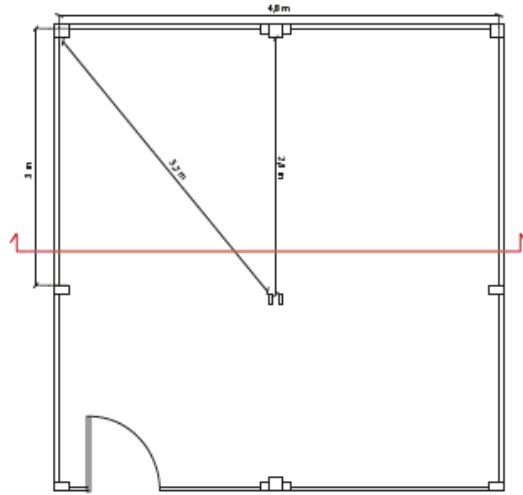
*IdeaSquare & Media Lab*

An Interactive & Immersive  
Space for IdeaSquare

Purposely-built virtual  
experiences relevant for  
IdeaSquare's activities



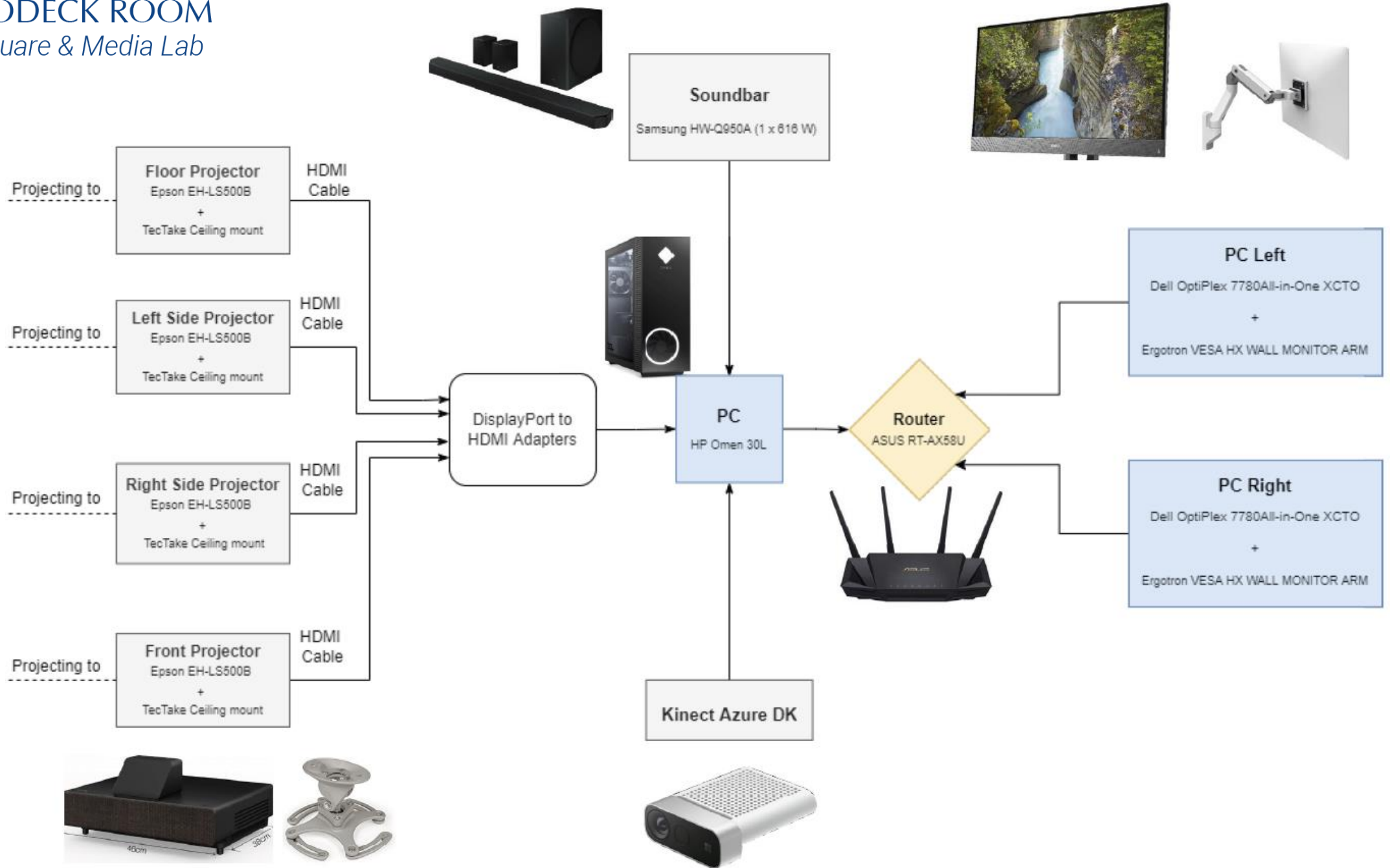
# Holodeck Study



Top View

# HOLODECK ROOM

IdeaSquare & Media Lab





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*Idea<sup>s</sup>*