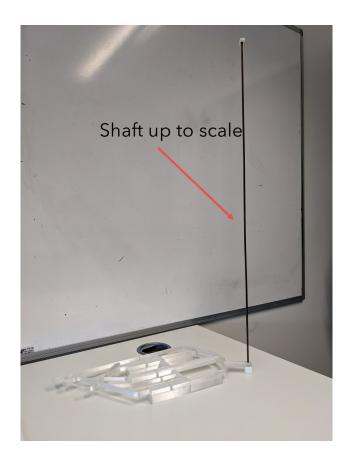


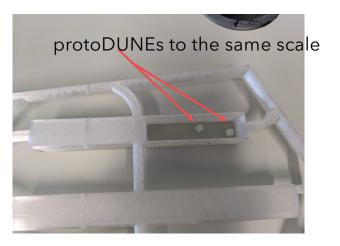
UPDATE ON THE 3D MODELES

PHELTON STEPHENSON, LINHUI GU, ISOBEL MAWBY AND JAREK NOWAK

DUNE FAR DETECTOR FACILITIES

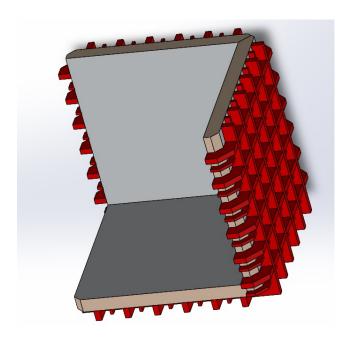
- Model 1:2000 redesigned and manufactured by Phelton Stephenson from Lancaster Mechanical workshop.
- The material is translucent we can add for example illumination representing the data flow.
- We can paint it and label the elements.
- I plan to get a big ben key ring when I am at the airport next time 4.8 cm big ben would be to the same scale.
- We need a list of facts about the facility: size, depth, how long it takes to go down by the lift, ect.







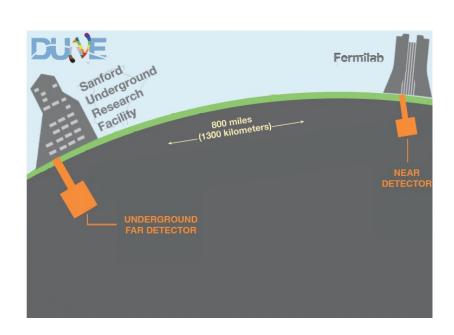
PROTODUNE MODELS



Phelton created a design and is working on the manufacturing

- Big external plastic parts ordered from an external company
- Steel mesh ordered and arrived
- Will focus on the 30x30x30 cm3 first.

NEUTRINO OSCILLATIONS GAME



- A button to send neutrinos
- LEDs between Fermilab and SURF to show the neutrino oscillations
- A bar chart with three colors to show what neutrinos are detected at FD.