

● INTRODUCTION TO THE CAVEANS ENGINEERING  
SESSION

neutrino beams



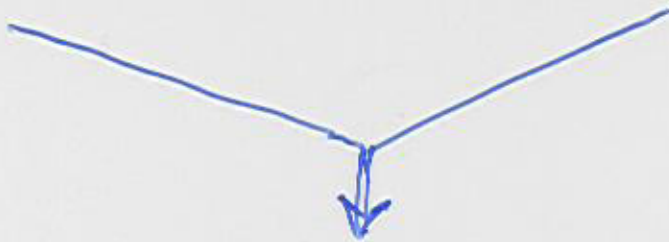
weak interactions

proton decay

supernovae



rare events



large detectors



large (underground) laboratories



cavities

• Relevant characteristics  
of an underground laboratory

⇒ location ⇒ "magic" distances  
(accelerator ↔ detector)  
long baseline

⇒ depth ⇒ rock protection against  
cosmic rays (muons)

↳ see plot

⇒ quality of the rock

⇒ total volume of the underground  
laboratory

⇒ number of cavities (one or more?)

⇒ type of geometry for each cavity

- "tunnel shape"
- "cylinder shape"
- "toroidal shape"

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