

Current Status of Water Cherenkov tanks technology

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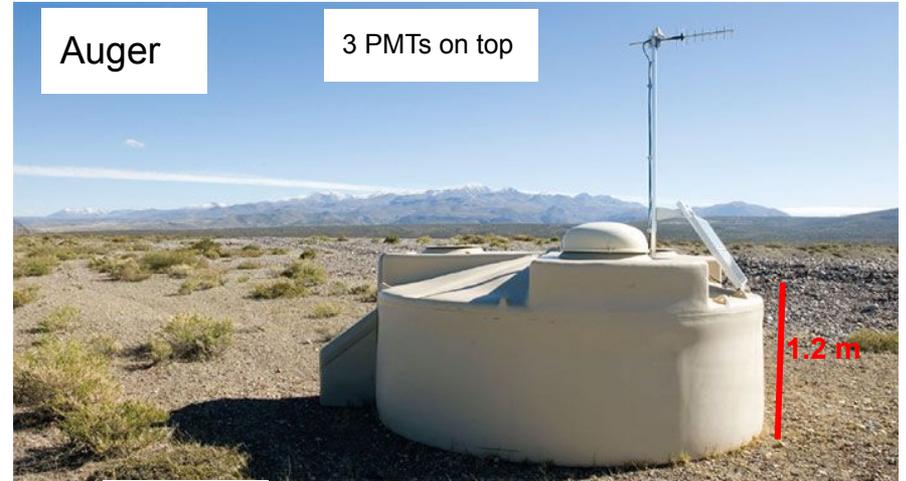
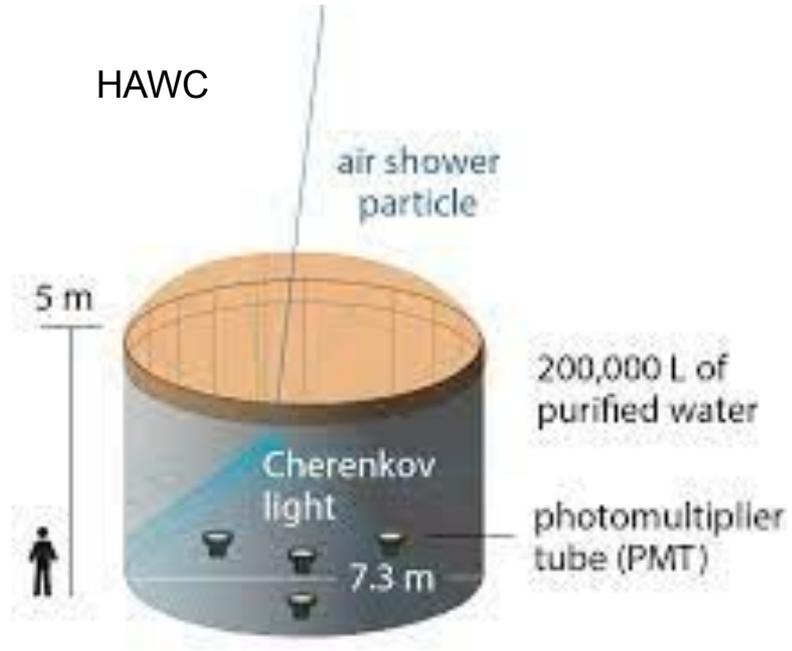


SEMINARIO / CONVERSATORIO

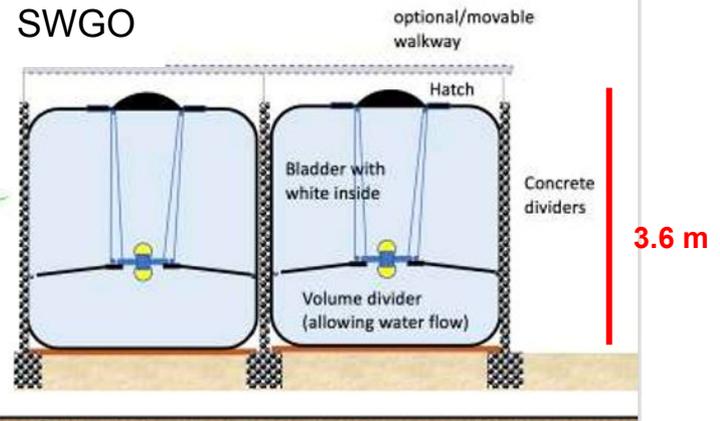
TAMBO workshop

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Water Cherenkov sizes can be customized and PMTs can go in different tank locations



SWG0



Aquamate tanks are delivered in compact cases and are simple to assemble
(Pictures from Michael Schneider, US)



Tank and Geomembrane Created and ready for shipping from Australia to Peru

Very easy to transport
Price scales with volume
(US\$6500 shipped to Perú
Volume: 3.6 high, 3.6 diameter)



Advantages of WCD with respect scintillator detectors

- WCD have an effective area that could be constant with the incident angle of the showers, while scintillators have smaller effective area for showers that are inclined with respect the normal direction.
- Vertical muons can be used to monitor the calibration of Horizontal Equivalent Muons (HEM), which is relevant for TAMBO.
- WCD could be deployed more spaced, for detecting showers that arrive with large angles away of the normal. Increasing the detector aperture.

The read out and DAQ system can be the same as the one used for a Scintillator detector