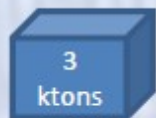


Detectors for DUSEL

Note: the DUSEL detector will likely be realized in 2-3 modules

The muon rate in the DUSEL detector will be $1/30^{\text{th}}$ that of Super-Kamiokande



IMB

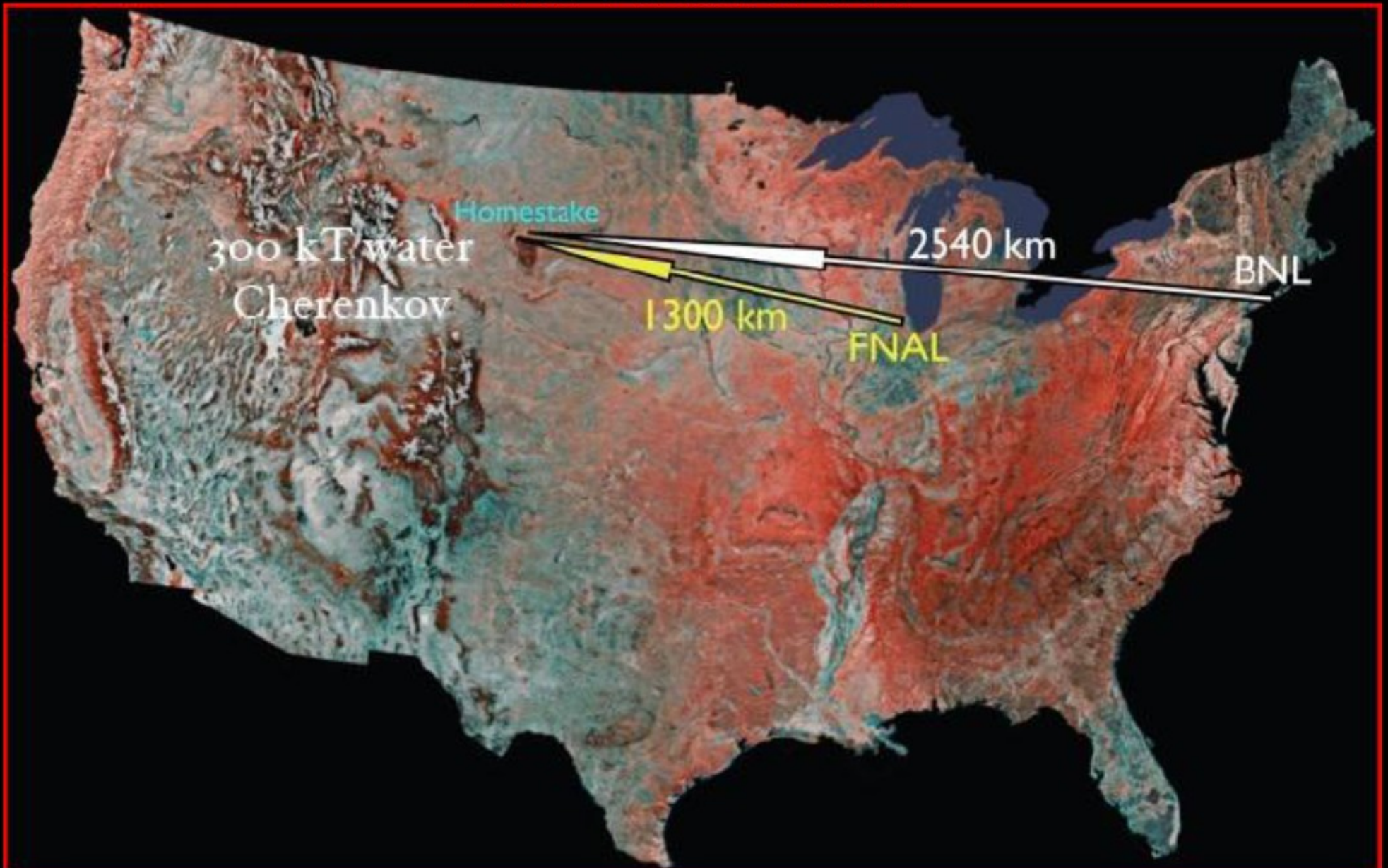


Super-Kamiokande



DUSEL

DUSEL LONG BASELINE EXPERIMENT



~330 ft.

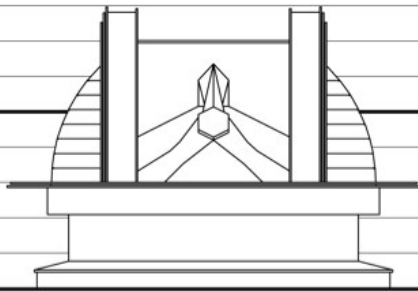
Large Detector Cavity
55 m diameter x 55 m high



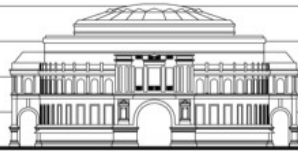
100m

50m

0m



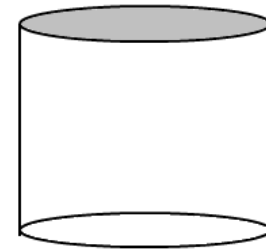
E-ELT Enclosure



Royal Albert Hall

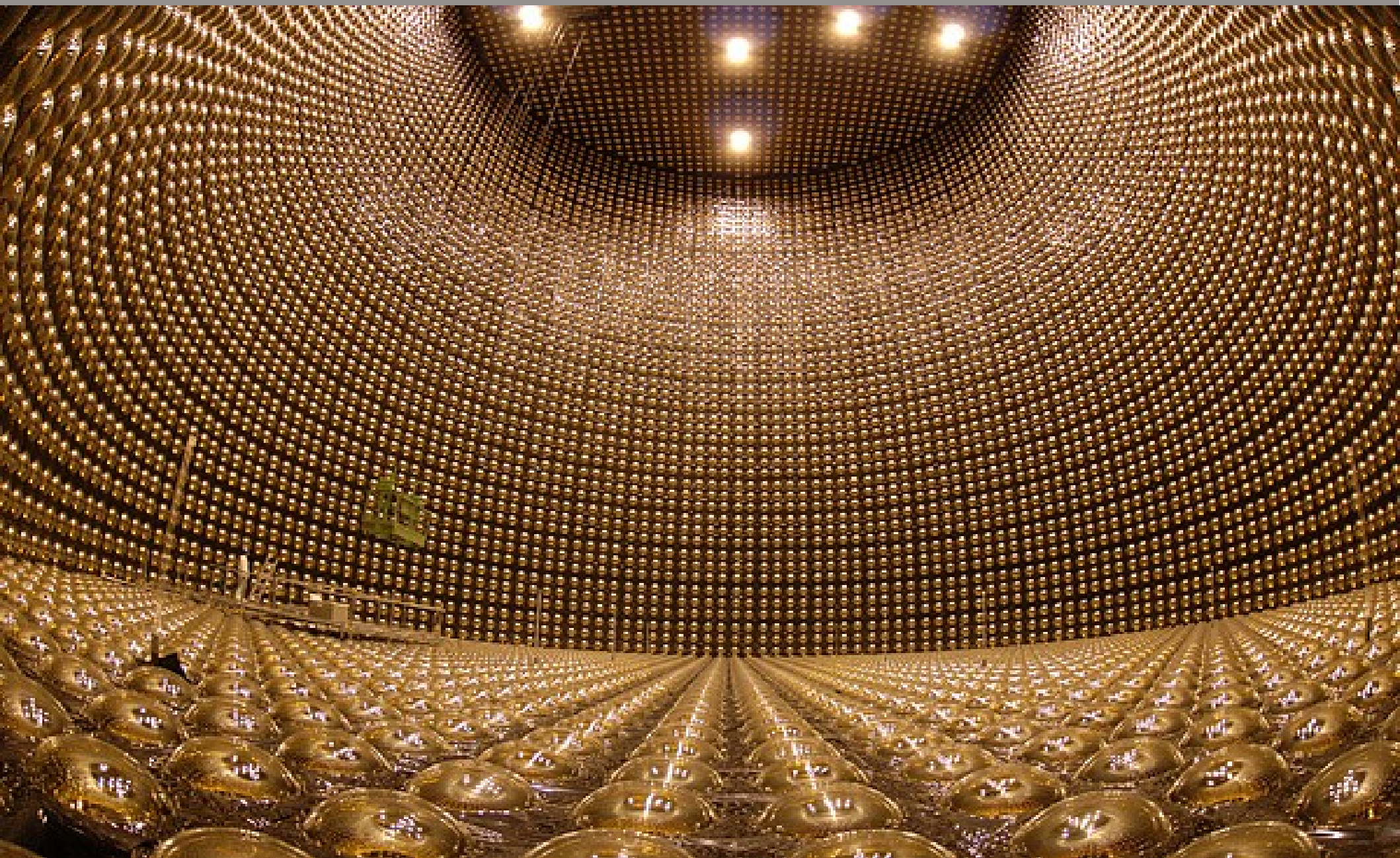


Nelson's Column



**DUSEL
Large Cavity**

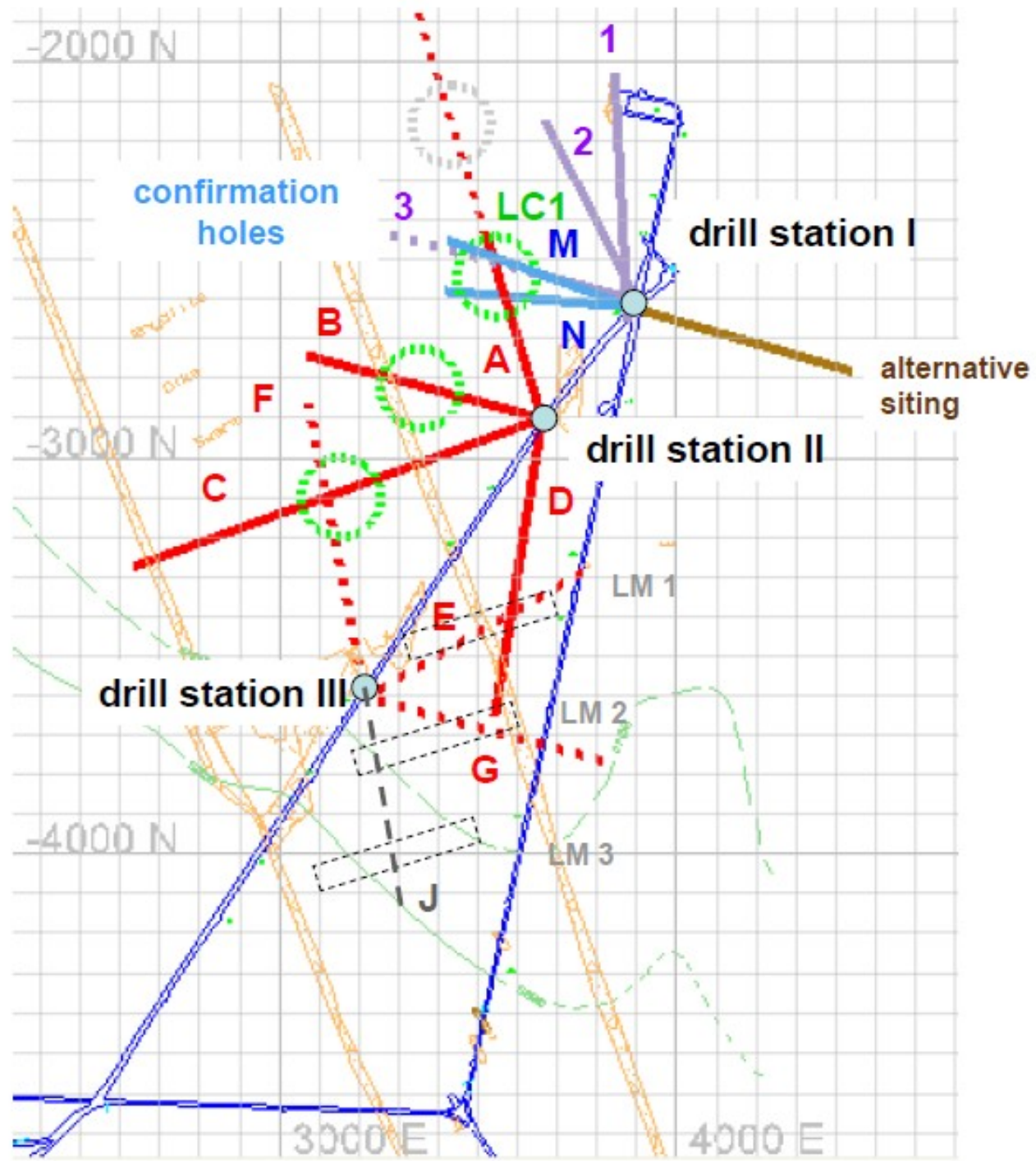
Underground Scope



Super Kamiokande Photomultiplier

Super Kamiokande
11,146 **photomultiplier**
tubes (PMT) 20 inch (50.8
in diameter that face the ID
and 1885x8" (20.3 cm)
PMTs that face the OD.









(Semi) Unique Aspects of Homestake

Science begins before the project begins -- gradational approach to the science

Close interaction and cooperation with a non-academic/non-scientific entity is required

User groups are truly multidisciplinary