

CJPL recent status and future

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On behalf of CDEX Collaboration
Feb. 27 , 2013

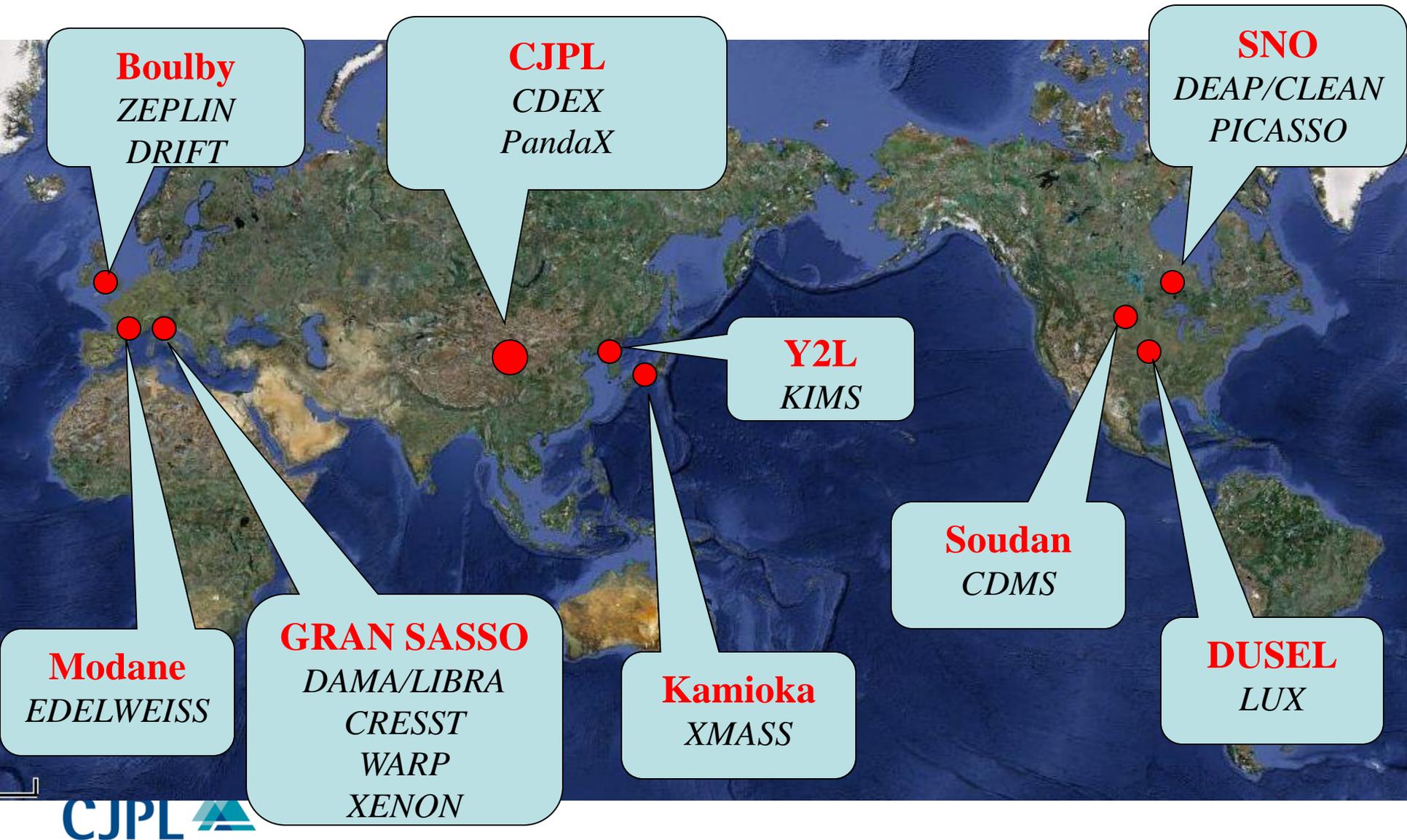


中国锦屏地下实验室
China Jinping Underground Laboratory

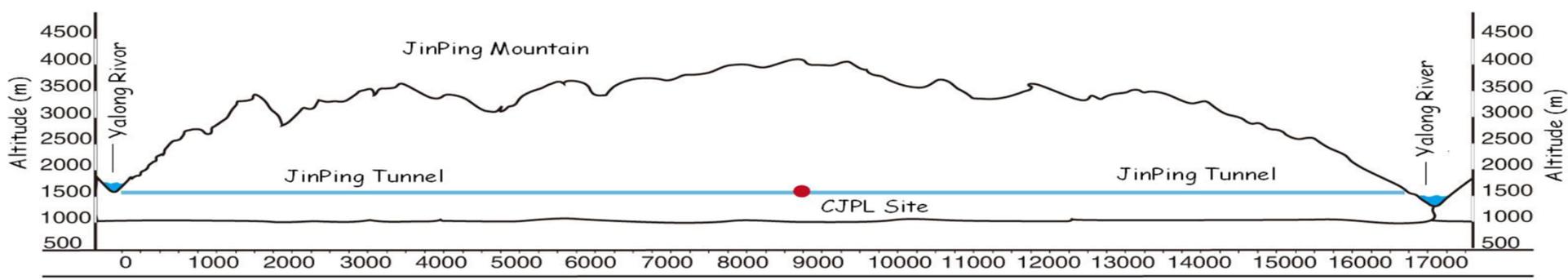
China Jinping Underground Laboratory (CJPL)

- Tsinghua University, have collaborated with Yalong River company to construct and run CJPL. It is the deepest underground formally run now in the world.
- CDEX has done many measurement of its main parameters including muon flux, thermal neutron background, gamma background. These parameters are very important for dark matter experiments.

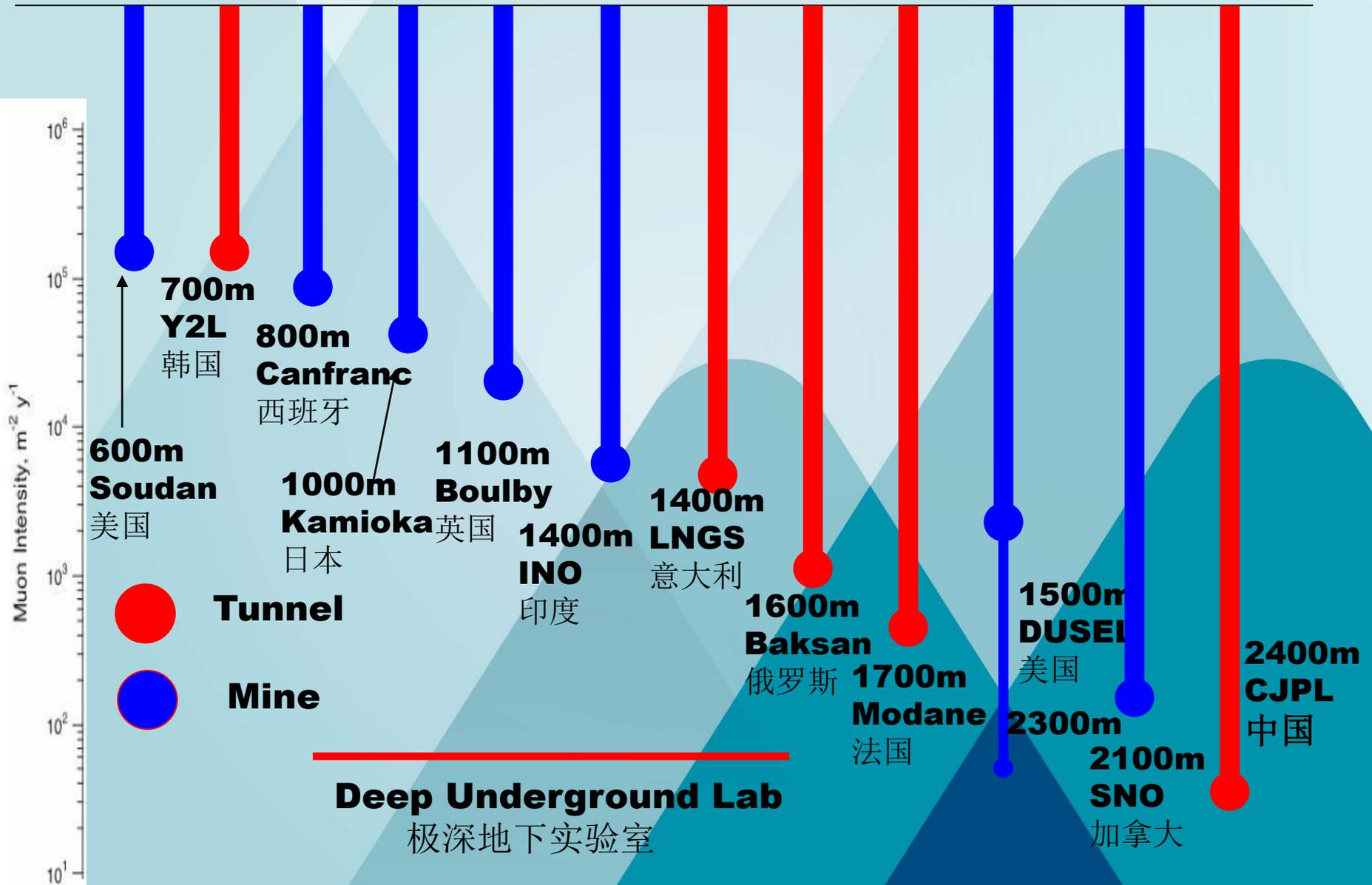
International Main Underground Laboratories



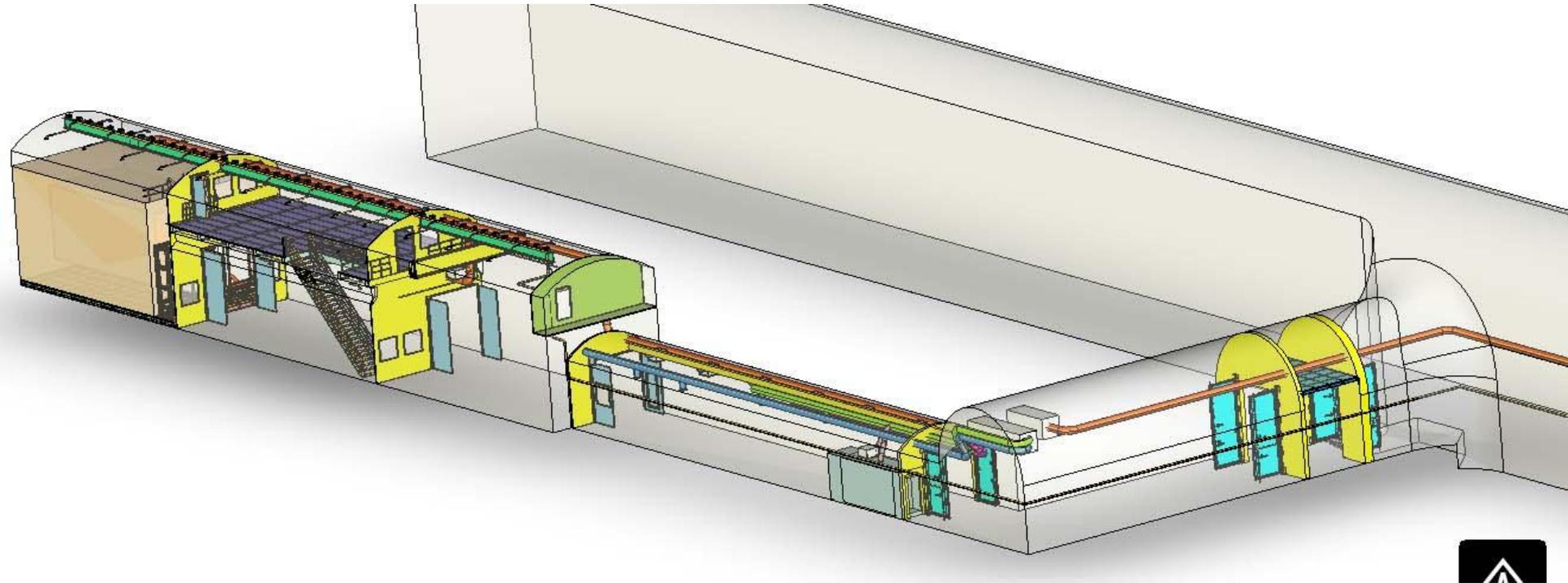
CJPL site



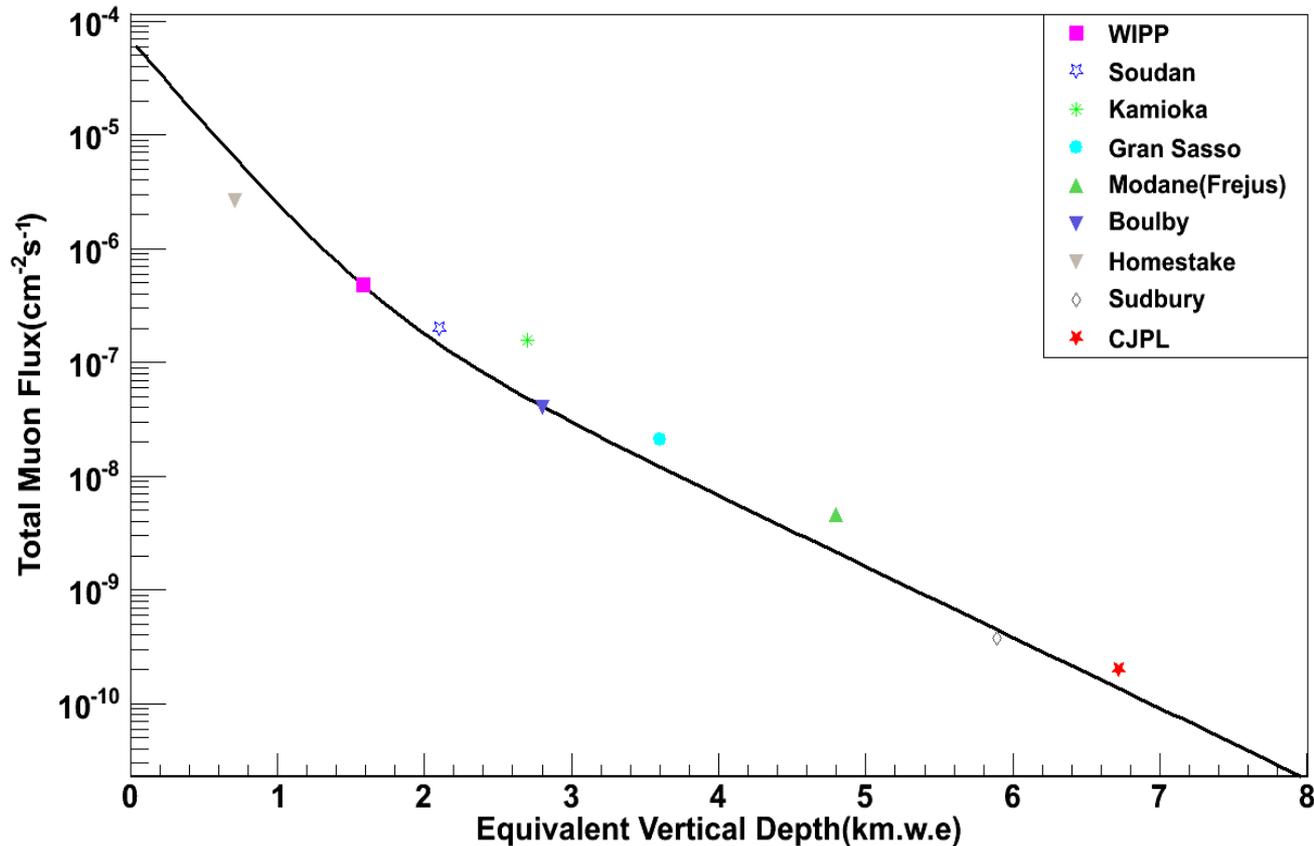
UL in the world (rock overburden)



CJPL recent status($\sim 4000\text{m}^3$)

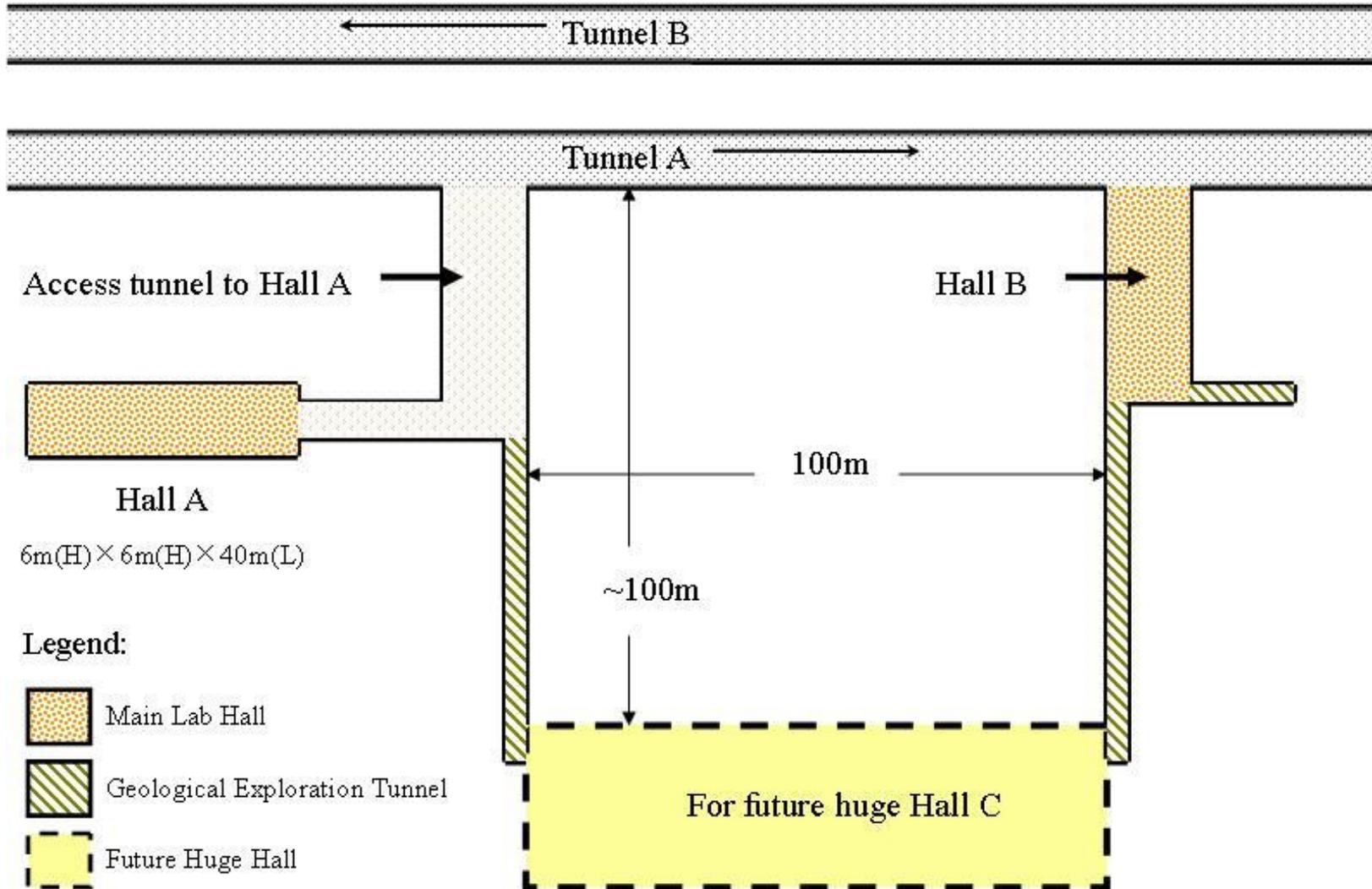


Muon flux at CJPL



- Muon flux measured result: ~ 60 muons/year/ m^2

CJPL Future Plan



Summary

- CJPL with deepest rock overburden in the world run now. Muon and Neutron flux measured and first LBF running!
- CJPL can provide larger space in the near future to host more low background experiments.
- The medium-term plan for CJPL is to built an underground lab with available space 20 times more than the recent one. Now under design including several spaces with the dimension of 12m(W)*12m(H)*50m(L).