HyperK design and objectives

HyperK will consist of a 60m high vertical cylindrical tank with 40% photocathode coverage (81,260) for Cherenkov ring imaging in an inner volume of ultrapure water, with an outer detector for background vetoes. It will be excavated in the Toshiboro mine, ~8km away from SK.

A second identical Tochibora mine, Hyper-Kamiokande will consist of a 60m high vertical cylindrical tank and will have 40% photocathode coverage.

- Nuclides
- Accelerator: T2H\(\text{H}K\)
- Solar fusion and flares
- Atmospheric
- Astrophysical (GRB, GK, pulsar...)
- SuperFermilab (Relic and hopefully) Buphonic
- Nuclear decay
- Dark matter (MWMP)
- Geonutrition physics

FEM validation

Finite Element Modeling (FEM) scenarios were developed in-house at Universidad Autónoma de Madrid (UAM) and the University of Tokyo (UT). The scenarios were validated by means of a conical SUS design.