

**SNOWMASS topical workshop
Neutrino Physics Frontier
NF04 (Natural neutrino sources)**

No.1 : Atmospheric neutrinos

November 23, 2020 (online)

Discussion

- See also NF01 <https://indico.fnal.gov/category/1168/>
- SK-Gd (just starting, possibility to improve separation between ν and anti- ν), HK (2027-, huge statistics makes more precise ATM- ν detection, e.g. solar modulation lowering 1 GeV)
- How precisely will the flux we get? (calculation and measurement)
 - C : For the measurement, it is convolution of flux and cross section. Need to know the cross section as precisely as possible.
- How much will the atmospheric neutrino measurement contribute on neutrino physics? (oscillations, NSI, etc.)
- Any other interesting topics?