

# HK Sensitivity to Sterile Neutrinos and Lorentz Violation

*Thursday 29 January 2015 15:00 (20 minutes)*

I will present studies of Hyper-K's potential sensitivity to sterile neutrino oscillations induced by the parameters  $|\theta_{\mu 4}|^2$  and  $|\theta_{\tau 4}|^2$  and isotropic Lorentz-violating parameters from the Standard Model Extension (SME). These sensitivity studies are based on SK analyses, scaled up to equivalent HK livetimes.

## **Length (min.) request (including discussion time)**

20 minutes

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**Session Classification:** Physics Potentials

**Track Classification:** Physics Potential