



- Unfortunately, we need to consider succession plan for Akira in 2025-2030 period
 - Ideal scenario includes overlap with Akira at 50%
- Hyper-K/IWCD detector construction will be taking place in 2025-2027
- Hyper-K/IWCD commissioning and initial exploitation in 2027-2030 will be critical period to establish the successful application of TRIUMF/Canadian HK contributions to the experiment
- Hyper-K/IWCD highest impact results likely to arrive in the 2030-2035 period
- Canadian contribution of mPMTs and photogrammetry to IWCD is funded.
 - TRIUMF will play leading role in IWCD construction, commissioning and operation
 - Expect that TRIUMF will lead detector calibration and initial data analysis
- Requesting funds for Hyper-K calibration systems based on mPMT, photogrammetry and water quality monitoring systems in CFI-IF 2023 competition
 - TRIUMF will lead Canadian efforts to install, commission and operate these systems
 - Canadian systems will be used in bottom-up calibration technique enabled by computational gains from application of machine learning





- By ~2030, we will be considering what is next beyond Hyper-K in its initial form:
 - Upgrades to calibration systems to advance control of systematic uncertainties?
 - Upgrades of near/intermediate detectors to better measure neutrino-nucleus scattering?
 - Application of new detector technologies, such as WbLS, Gd loading, new photodetectors?
 - Major new initiatives, e.g. detector in Korea if CP effect is very small?
 - Completely new directions for experimental neutrino physics & mixing/oscillations?
- We recommend maintaining a third Hyper-K/Neutrino BAE in order to:
 - Complete TRIUMF's commitments to the construction, commissioning and operation of Hyper-K/IWCD
 - Establish the calibration and analysis techniques enabled by the detector systems we are building
 - Play a leading role in the initial and most impactful results from the Hyper-K experiment
 - Develop the next idea after Hyper-K in its initial form