

# Progress Update

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# Build WCSim

- After Hiro compiling the Geant4 libraries in

*/project/t/tanaka/T2K/HyperK/Geant4/src/geant4.9.6.p04*

- ✓ WCSim building is done successfully.

# Read WCSim Documents

- Finish reading the remaining part of *DetectorDocuments.pdf*
  - ✓ DAQ classes - for dark noise, digitization, and triggering
  - ✓ Output Root File
- To better understand how to use the output root file, I go through the sample-root-scripts in WCSim github.

# Learn SKalgorithm

- I'm now going through Theo's documents about SKalgorithm, since Emily's work is based on it.
- The general structure of SKalgorithm:
  - set up the environment variables for his algorithm (setup\_trunk.sh)
  - produce training/testing data using SKdetsim (simulation.sh)
  - run fitQun to get the current standard (fitqun.sh)
  - produce the PMT read-out images (process.sh)
  - perform the machine learning (algorithm.sh)

# Next Step

- Once I'm familiar with how to use Theo's algorithm, Emily's work will make more sense for me.