

Summary and toward determination of detector configuration

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Current status

- WCSim
 - Include HK geometry.
 - Dark noise generator is installed.
 - HPD simulation is under construction.
- fiTQun
 - Event finder problem has been solved.
 - Fully applied to WCSim with SK mode and HK mode.
 - Still need to investigate mis-reconstructed events.
- Computing
 - Prepare software managing and mass production system with GRID.
 - MC test production has been done and 1st physics sample will be provided to physics group soon. Need feedback from physics group.

Toward decide detector configuration(1)

- Need MC&reconstruction tool to study detector configuration.
- Options
 - Number of compartment: 5 (LOI) /3 /1 : Important for cost reduction.
 - Photo sensor: PMT(LOI)/HPD /New PMT
 - More ?

Toward decide detector configuration(2)

- Number of compartment

- WCSim can easily change detector length.
- 1st version of fiTQun can be work .
- Quick Study (one month): Generate typical events ($e/\mu/\pi^0$) with different detector length and compare performance.
- Long term (several months): Generate physical events and provide to physics group.

- Photo sensor

- Install HPD performance into WCSim (early in Feb).
- Quick study: Generate typical events ($e/\mu/\pi^0$) with HPD.
- Long term(1): Generate physical events provide to physics group.
- Long term (2): Install performance of 20inch HPD and new PMT.

Time line

- 1st Physics sample by WCSim will distributed early in Feb.
- Quick study for compartment length and HPD: end of Feb.
- Physics sample with deferent compartment length and HPD: release in several months.
- Physics group can start discussion sensitivity with various setup.