WP3: Introduction

Work Package Number	3		Start/End Month			1 / 48	
Work Package Title	Towards the Hyper-Kamiokande detector						
Lead Beneficiary	QMUL						
Participating organisation Short Name	INFN	QMUL	RAL	NCBJ	UGE	CAEN	U-Tokyo

Objectives:

- Test a Gd-doped water Cherenkov using the existing Super-Kamiokande detector -
- Accurate optical calibration of a large tank Cherenkov detector. -
- Design the Outer Detector for the Hyper-Kamiokande experiment. -
- Design specific low-threshold, low-noise, large dynamics front-end electronics. -
- Develop realistic simulation of the Hyper-Kamiokande detector. -
- Several agreed changes so far:
 - QMUL->KCL
 - NCBJ) but different from the one in the initial report (Geneva).

- HK electronics chosen by HK still led by JENNIFER2 institutions (INFN,



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Description of Deliverables and Milestones:

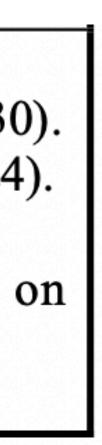
Task 3.1: decision of the feasibility of the UV system to measure Gd concentration in Super-Kamiokande (month 30). Task 3.2: data taking and analysis of the light pulse calibration prototype after the first year of data taking (month 24). Task 3.3: technical note on the proposed Outer Detector system (month 36) Task 3.4: Milestone:test report on waveform digitizer(s) performance (month 30). Deliverable: Final report on front-end activities (month 48)

Task 3.5: simulation data analysis with the final photosensor configuration (month 48)

- Brief status

 - by review committee.
 - Task 3.4: Technical notes available and ongoing reviews.
 - Task 3.5: ongoing work well advanced.

- Task 3.1: agreed to run in SK. Ongoing work on the design. - Task 3.2: done. Already described in submitted report to the EU. - Task 3.3: a few technical notes are available and being reviewed







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- WP3 agenda: - HK OD System (FDL) [Task 3.3] - HK Simulation (Tom Dealtry) [Task 3.5]
 - HK Electronics status (Luigi Lavitola) [Task 3.4]

Caveat: the content of each talk is confidential.

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