Progress of Shintake monitor work

KEK site meeting 2009/7/1 T. Yamanaka

Progress Status

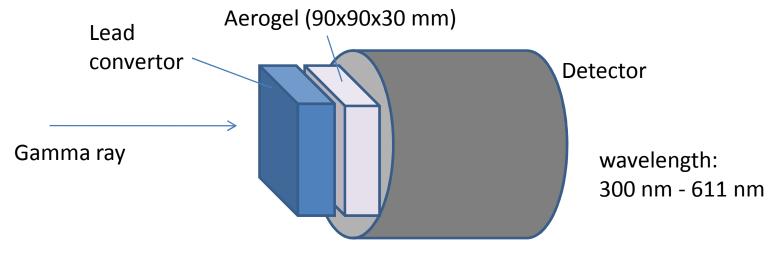
- Screen monitor & knife edge
 - waiting for the design from Seiwa Co. Ltd.
- Collimator scan stage
 - Stage was arrived
 - Remaining work
 - make lead block collimator



Collimator scan stage

Cherenkov Detector (1)

- Simulation of signal resolution using GEANT4 was finished (by Yamaguchi).
 - Aerogel types (SP-15, SP-30, SP-50) -> not so different
 - Lead convertor thickness -> the best resolution obtained with 12 mm thickness convertor



Geometry in simulation

Cherenkov Detector (2)

- Fabrication was started
 - Materials are almost prepared. Fabrication is relatively easy.





Laser Optics

- Phase stability measurement during Monalisa installation is expected.
- However, due to lack of site work it is difficult to prepare 174 deg mode measurement

- Low angle modes measurement is possible.

Laser Trouble

- During the laser operation spark was observed from laser power supply.
 - stopped the operation immediately
 - It was due to the leakage of oil from oil capacitors.
 - They are the replaced ones last year.



oil was leaked from this capacitor

Replacement of Capacitors

- Replaced the capacitor leaking oil by stored capacitors.
- After the replacement, the laser runs normally.



After the capacitor replacement



oil leaking capacitor

Schedule

			Month June					July				August				September				October				November			Decemb		
Task	Start		Week	1	1 2	3	4	1	2	3	4	1	2	2	34	1	2	2 (34	1	2	3	4	1	2	34	1	2	3
ATF Beam Operation	2009/10/19	2009/12/18																											
Monalisa	2009/7/2	2009/7/18																											
installation and dimount																													
								[
Screen monitor & Knife	2009/6/1	2009/8/31							_																				
Design																													
Fabrication				Γ																									
Installation																													
																1													
Collimator scan	2009/6/1	2009/7/24																											
Design																													
Assembling																													
Laser Transport	2009/6/1	2009/9/30		Γ																									
Design				Γ																									
Transport line construction																													
Injection to the table																													
DAQ software	2009/7/1	2009/10/9		Γ																									
Design																													
Programming																													
				F																									
Timing signal pickup	2009/7/18	2009/8/1		F																									
Fabrication																													
Installation																													

Schedule

