Forward Module K5 hybrid meeting

20 Dic. 2001

Agenda

1.	Status of DYCONEX hybrids	. 1
	Status of K5–301 (Freiburg)	
	Status of K5–300 (Liverpool)	
	TODO list.	

1. Status of DYCONEX hybrids.

DYCONEX has not give any news yet. Lutz should call them tomorrow to see whether the hybrids will be ready before the end of the year of after Xtmas. In any case, this should not affect the original planning since the next 2 weeks there will be no activity.

2. Status of K5-301 (Freiburg)

This hybrid was not tested at CERN. A number of measurements have been made in the last week. The results, can be found in

http://sct.physik.uni-freiburg.de/feld/sct/module/K5/k5-301/k5-301.htm

Also available are the tests made before the SCT week on the K4_300 module (now at Liverpool):

http://sct.physik.uni-freiburg.de/feld/sct/module/K5/k5-300/k5-300.htm

Going back to the K5_301, the good news is that there have not been any *bad* surprises. Several grounding configurations have been tested, and also different temperatures. Apparently the results improve slightly with higher temperatures. This is something to be understood, althoug similar effects have been observed in the barrel modules.

Correlation studies at different temperatures also favor temperatures above 0° C (on the chiller).

They are still using the SCT-LV2 in their setup with short cables (about 3 m). Upgrading to the SCT-LV3 is expected to improve the results.

To conclude, the module works perfectly above 0.3 fC, performing equal or even slightly better that a barrel in terms of noise.

3. Status of K5–300 (Liverpool)

Ashley is having some problems with his setup at Liverpool and this may affect the performance of the module, which is not as good as when measured at CERN during the SCT week. The results and his comments are available at

http://hep.ph.liv.ac.uk/~ashley/k5 300.html

He has tried a couple of configurations,

- Module mounted directly onto the cooling block (shunt–shield short–circuited?)
- Module electrically insulated from the cooling block using a Thermal pad (0.12mm thickness)

Both configurations yield approx. the same values for the gain and the input noise, but the second shows a somewhat higher noise occupancy.

Still needed is a bit of work on the setup to understand the differences between CERN+Freiburg and Liverpool results on that module.

4. TODO list

Activities will stop during Xmas and restarted on the week of the 7th of January.

DICONEX modules' construction should start during that week.

We should aim at having at least 4 modules ready for the system test at the end of January of beginning of February. To this end we should foresee to provide our own manpower, although there should be some overlap with Paul and Richard