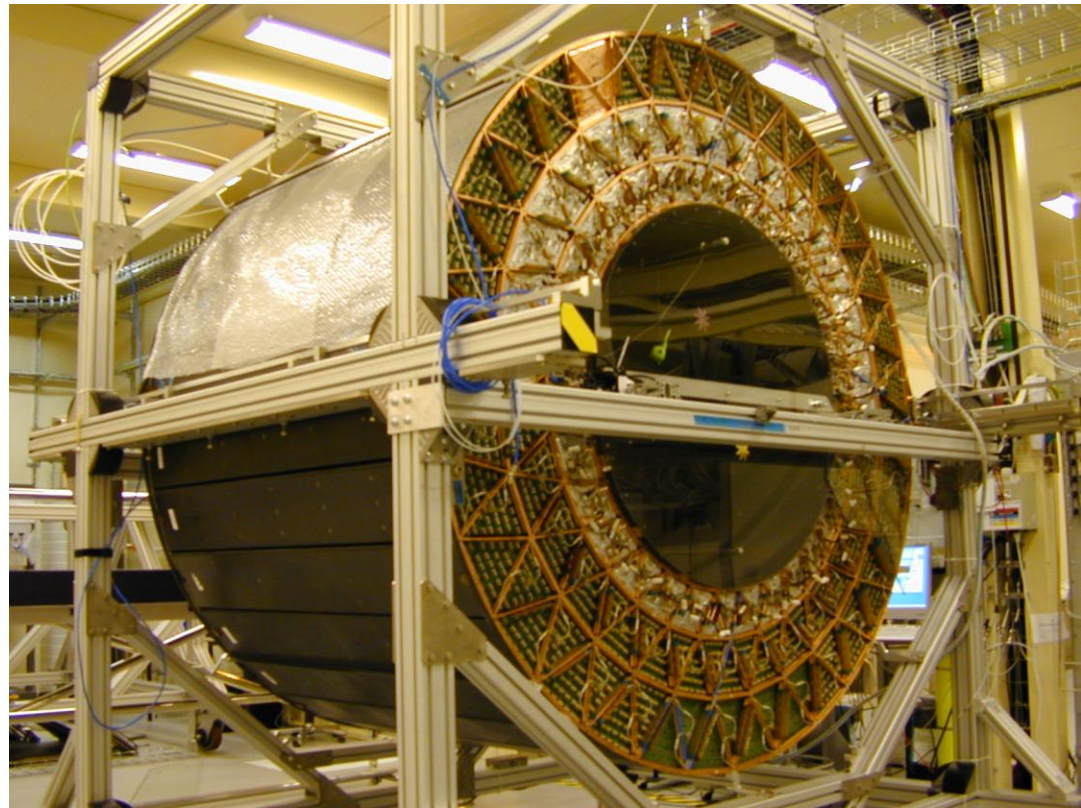


# Module final acceptance status

1. Status report and modules quality
2. Preparation of spare modules

Pauline Gagnon – Indiana University



# Module testing status: done!



# Latest news

- 🚫 **Module 3.24 still does not meet acceptance criteria**
- 🚫 **So module 3.31 was installed with 51 dead channels**
- 🚫 **Module from test beam are undergoing final HV conditioning: **some are already certified****
- 🚫 **10 modules left after installation: at least 2 of each type will be prepared for spares**

Type 1	1.01, <b>1.26</b> , 1.28, <b>1.30</b>	<b>1.28: no problems so far</b>
Type 2	2.05, 2.13 <b>2.36</b>	Some HV problems <b>Now certified</b>
Type 3	3.13, 3.24 3.34, 3.35	Serious HV problems 49+ and 60+ dead channels

# Modules 3.24 and 3.13

- 💡 **Many small pieces of wire lost between front tension plate and HV plate**
- 💡 **For module 3.24, six wire-joints already seen caught on end twister; very difficult to retrieve them**
- 💡 **Causes spurious HV trips in random places**
- 💡 **Could create havoc since burning a fuse to get rid of HV problems might not be feasible: we would then lose 200 straws instead of 8 straws per fuse.**
- 💡 **Extensive investigation with endoscope will start this week; if successful, module could be ready in 3-4 weeks**
- 💡 **If not, full restringing would take at least 2 months**

# Dead channels for TRT barrel

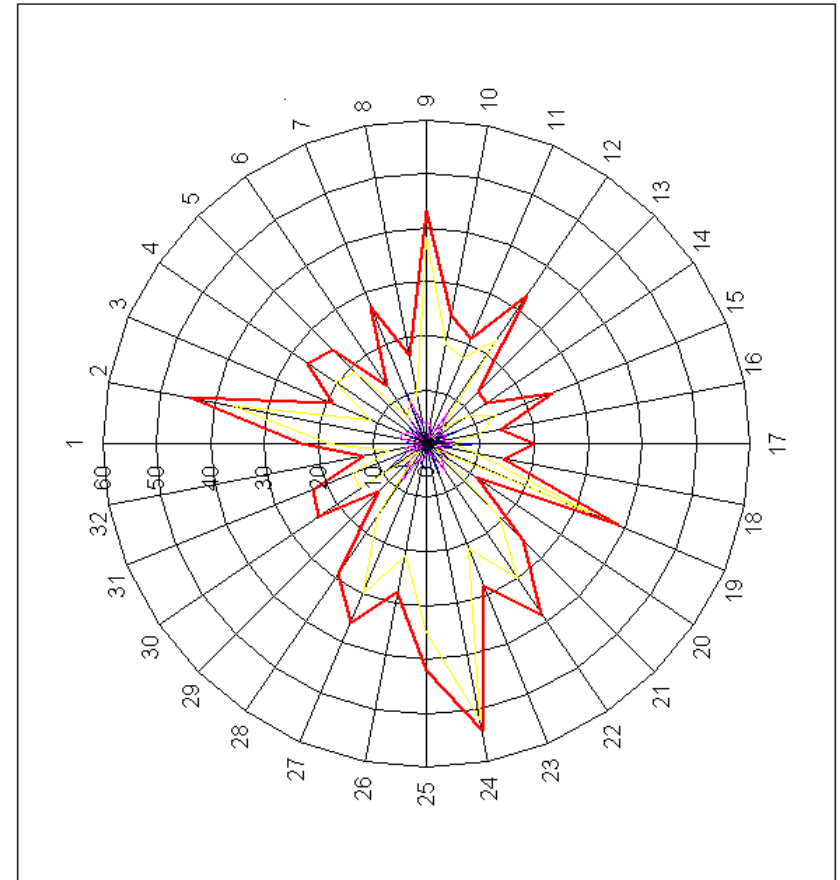
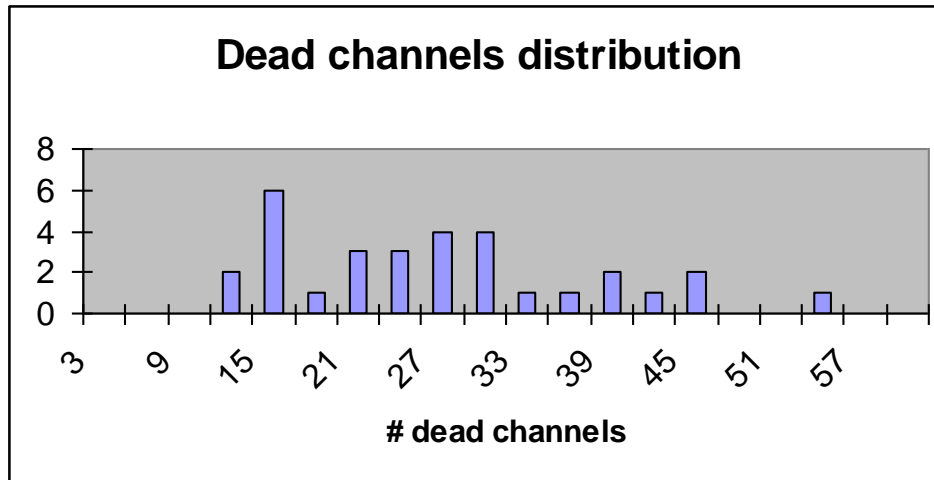
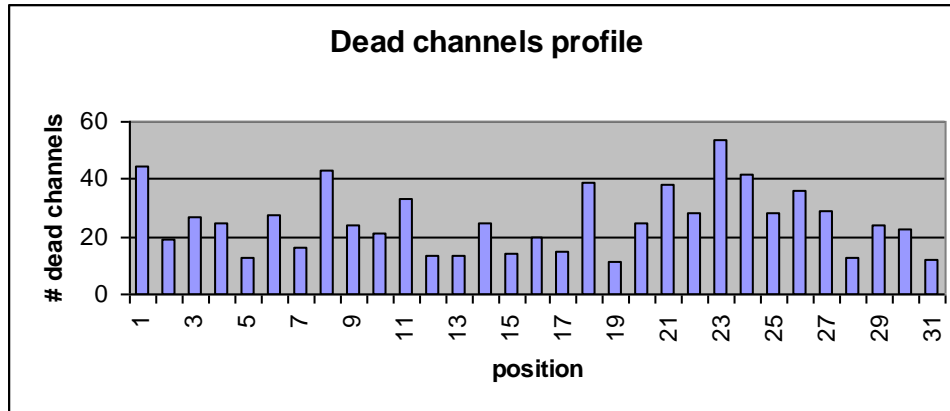
	type 1		type 2		type 3		TRT barrel	
	wires	%	wires	%	wires	%	wires	%
bent	9	7.3%	54	44.6%	313	53.7%	376	44.9%
gain mapping	13	10.5%	4	3.3%	19	3.8%	36	4.8%
HV problem	31	25.1%	37	30.6%	164	28.9%	232	28.6%
broken socket	1.5	1.2%	7.0	5.8%	5.5	1.0%	14.0	1.8%
unstrung	68	55.1%	18	14.9%	70	12.6%	156	19.7%
tension	1	0.8%	1	0.8%	0	0.0%	2	0.3%
total	123.5	1.17%	121.0	0.73%	571.5	2.24%	816.0	1.55%

# # of dead straws in type 3 modules

M3.02	2	M3.21	14	M3.33	23
M3.28	2	M3.07	14.5	M3.26	28.5
M3.10	4	M3.08	15	M3.17	30
M3.14	5	M3.05	16	M3.36	32.5
M3.22	6	M3.09	17	M3.27	35
M3.20	7	M3.01	18	M3.29	36.5
M3.12	8	M3.15	18.5	M3.19	38
M3.16	8	M3.25	18.5	M3.31	51
M3.06	9	M3.23	19	M3.34	49
M3.18	9.5	M3.37	19	M3.35	69
M3.32	10	M3.03	20.5	M3.24	17.5
M3.04	11	M3.11	21	M3.13	45

**Last 4 modules still have to pass QC criteria**

# Final dead channels distribution



# Last comment

**Module 3.31 with its 51 dead channels could still be replaced if we can get another better module to pass the HV conditioning criteria**

**Kirill is ready to insert 3.24 if need be**

