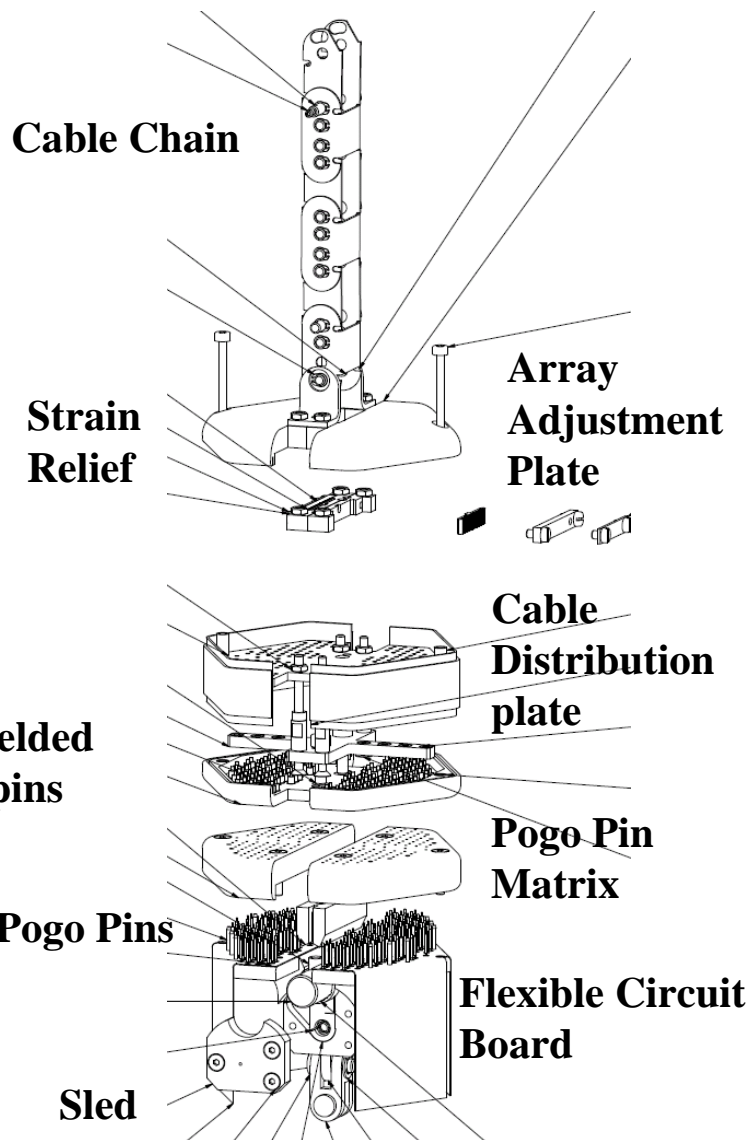
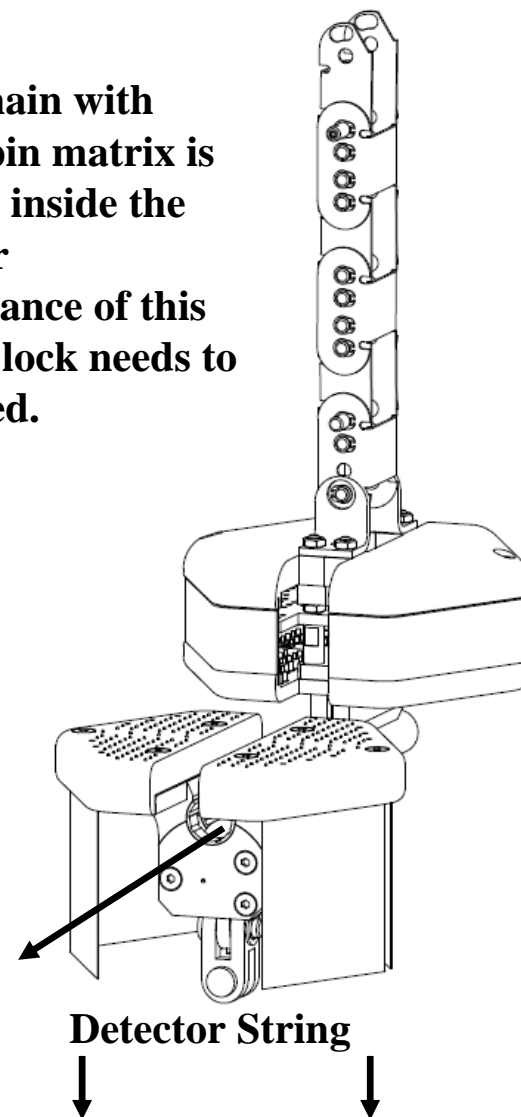




# The Connecting Matrix:



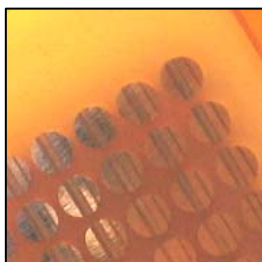
Cable chain with copper pin matrix is installed inside the lock. For Maintenance of this part the lock needs to be opened.





## The Connecting Matrix:

Transmission line design is ugly:  
too many connections, too many  
components!



Cables laser  
welded to  
copper pins

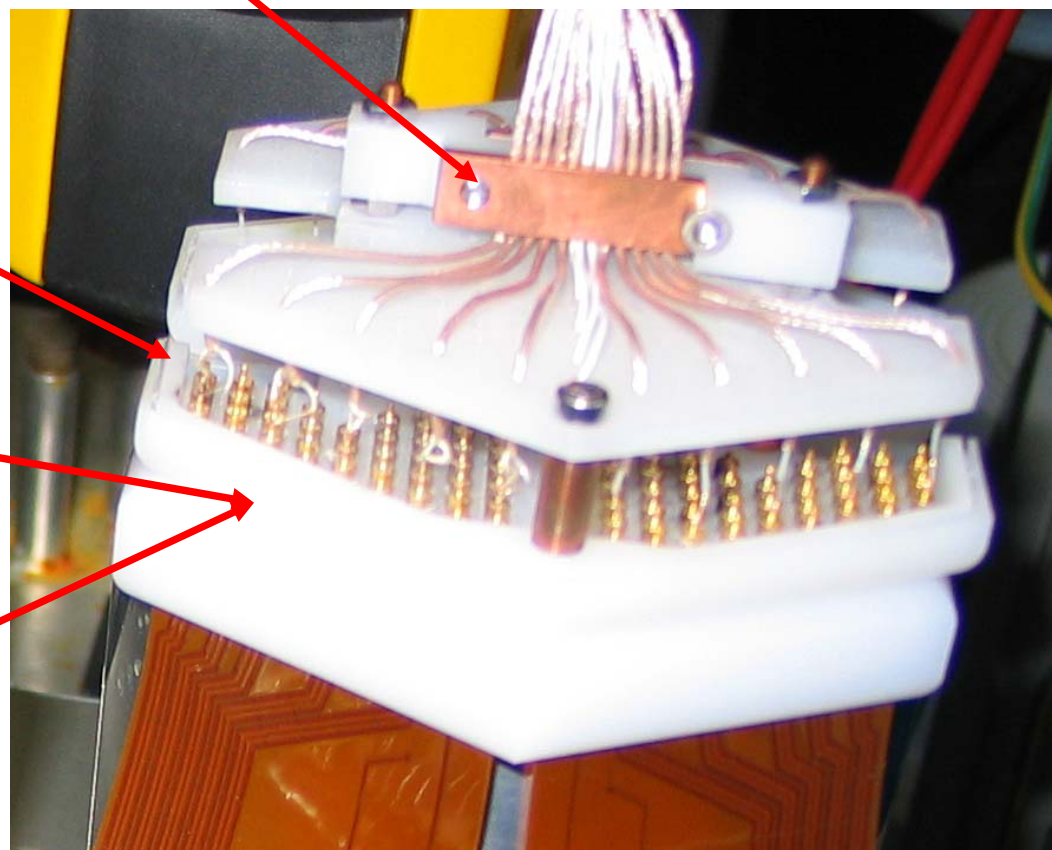
Contact surface of  
Copper pins Ni Au  
plated



Pogo pin matrix

Strain relief

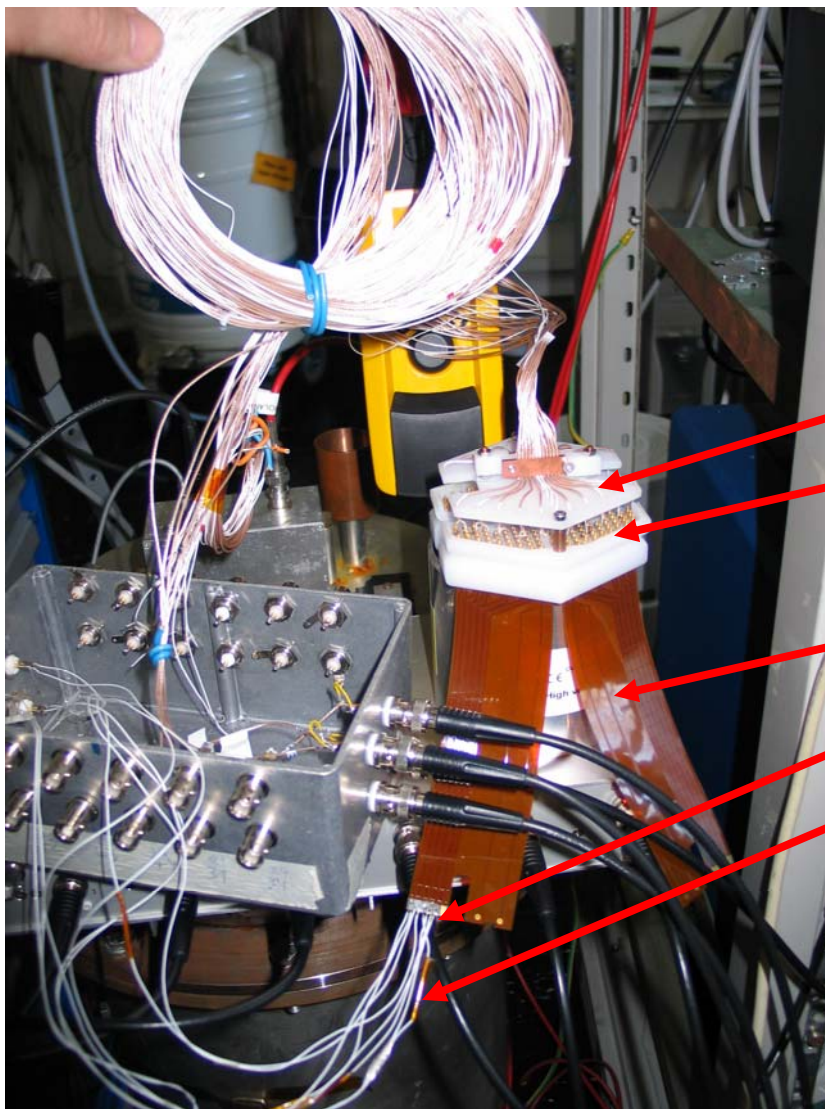
Coax cables



Kapton flat cable



## The Connecting Matrix:



**But: It works....should be sufficient for commissioning phase.**

**Whoever has a realistic (!) better idea, let us know!**

**Coax cables**

**Copper Pin**

**Pogo Pins inside Plastic (screened)**

**Kapton flat cable**

**Cables laser welded to FPC**

**Cables towards FE**

**Copper on kapton not screened →  
Trying to replace with PEN FPC**

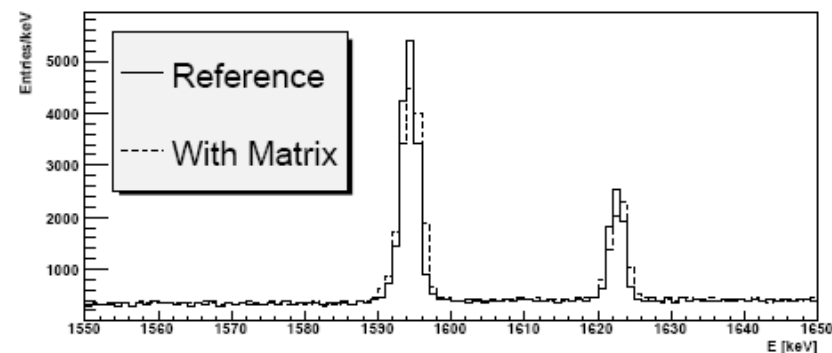
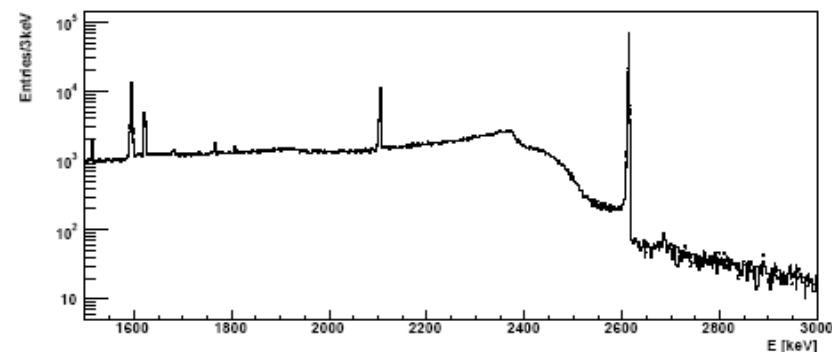
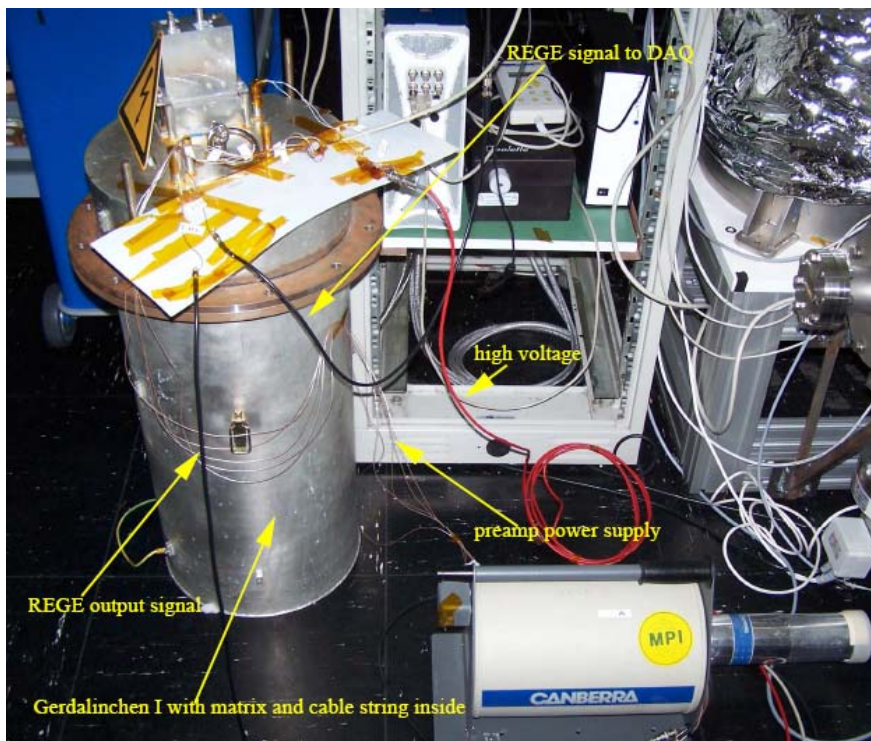


# The Connecting Matrix:

Signal, HV and preamp power supply have been fed through by the full cable chain!

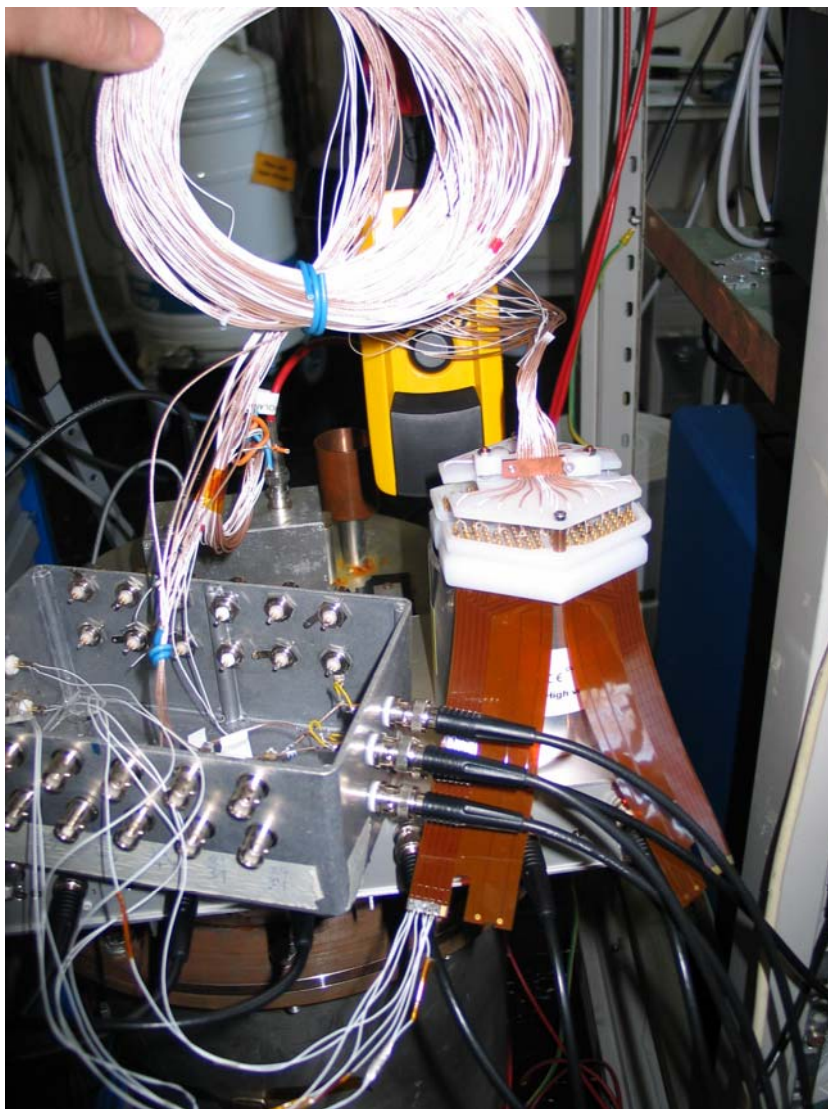
GSTR-08-013, GSTR-08-019

FWHM [keV]; REGE 2			
peak [keV]	reference I	with matrix II	preamp III
1173.0 (Co)	$2.140 \pm 0.037$	$1.976 \pm 0.030$	$2.208 \pm 0.041$
1332.0 (Co)	$2.175 \pm 0.035$	$2.135 \pm 0.032$	$2.267 \pm 0.045$
1460.0 (bg)	$2.220 \pm 0.061$	$2.016 \pm 0.016$	-
2614.0 (bg)	$2.630 \pm 0.152$	$2.820 \pm 0.038$	-





## The Connecting Matrix:





## The PZ0 – Matrix Interface

**PZ0 position depending on radiopurity**



**HV filter on top**

