

# Test Facilities for Germanium Detectors

**GDT Symposium 2013**

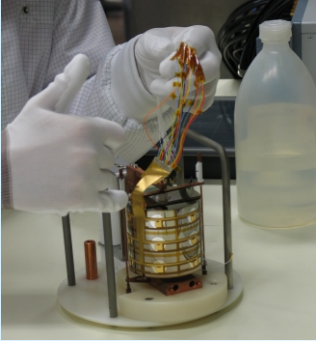
**I.Abt, MPI für Physik**



# Things to consider

- **Is this research ?**
  - on a particular detector ?
  - on a particular subject ?
- **Is this a serial test?**
  - which parameters ?
  - how many detectors/ per unit time ?
  - what is the unit time ?
  - how many people do I have ?

# Research Facility



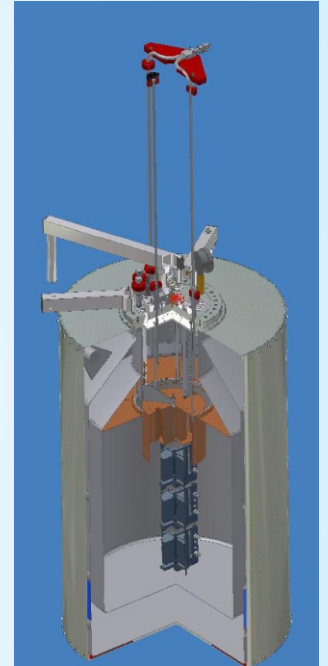
**Special detectors are to reveal fundamental facts about germanium technology.**

**Long tests [order of months]**

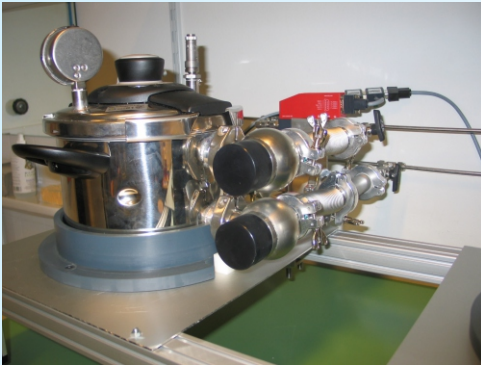
**It has to be possible to mount different detectors, but it is okay to take three weeks.**

**Lots of information about using a few detectors. You need dedicated personal, probably phd students writing their thesis.**

**It is okay, if the operation is involved.**



# Production Facility



**Serially produced detectors are to reveal whether they functions within predefined parameters.**

**Short tests [order of one day]**

**It has to be possible to mount quickly [one hour].**

**Few parameters about many detectors have to be recorded. A technician has to be able to do it.**

**Operation has to be easy.**

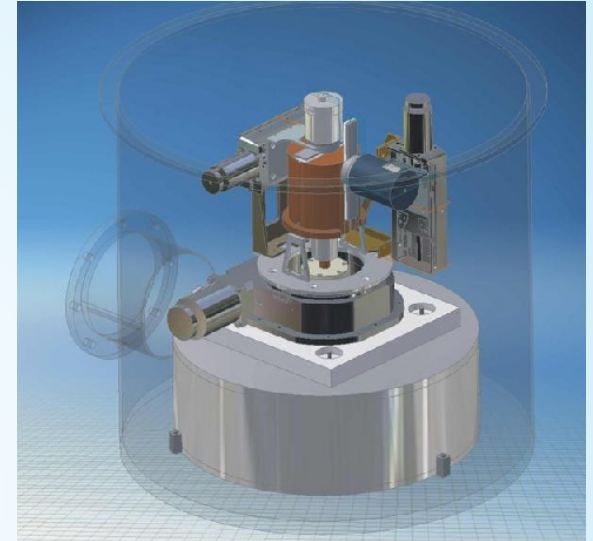
**The packaging will be essential. The manufacturer delivers something easy to qualify.**

# [In]Famous Last Words

**Do not mix tasks!**

**A flexible research test stand is by definition quite complicated.**

**A production line test stand is not allowed to be complicated.**



**We need to learn how to build quick and easy test facilities. It has to be part of the detector design.**