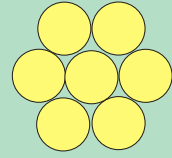


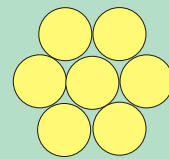
# **GERDA**



## **GER**manium

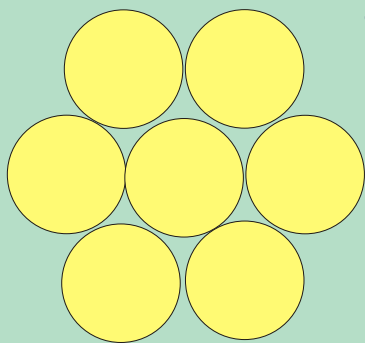
## **D**etector

## **A**vailability



**I.Abt  
MPI für Physik**

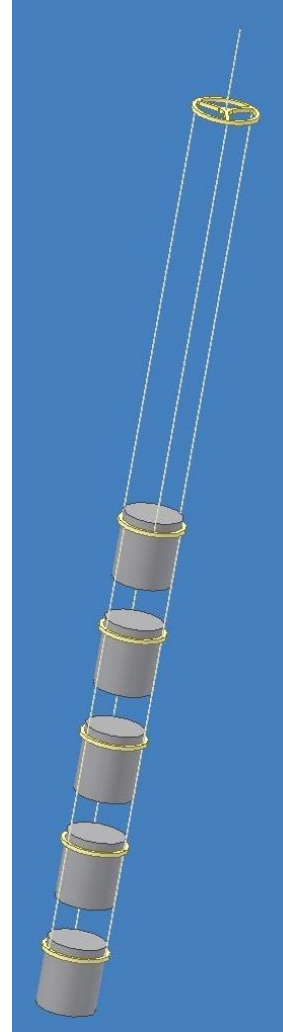
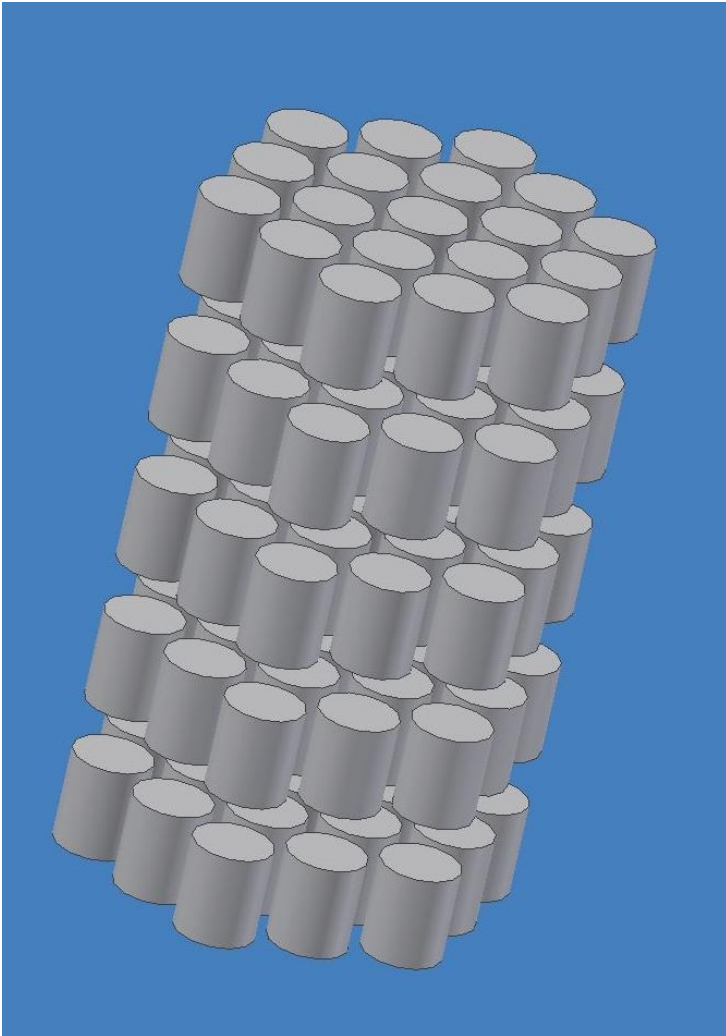
**Dubna  
June 2005**



## Detector Suspension

### Phase 2:

**7 strings with 3 detectors each.  
Can be exchanged individually.**



Siemens Lufthaken would be nice!

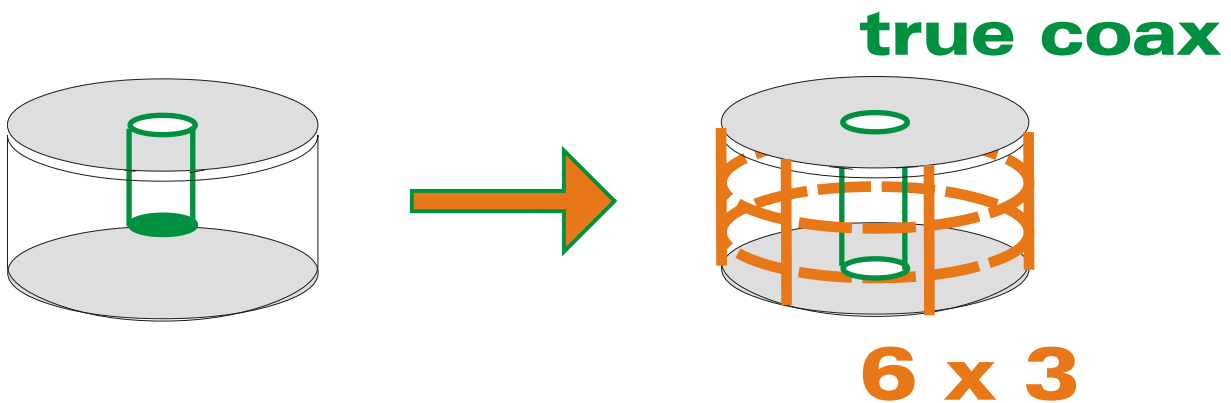
**HOLDERS have to be adjusted  
to detector technology**

# Germanium Detectors

## Phase 2:

New detectors from 85% enriched germanium.

**true coax**  
**segmented**



**n-type** or **p-type**:

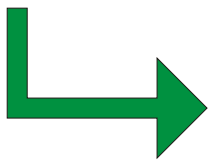
**Two technologies,  
two companies**

## p-type

### Prototyping:

**true coax**  
**6 fold phi** } **available**

**6 phi x 3 z** [new for the company]  
[ **on order** ]

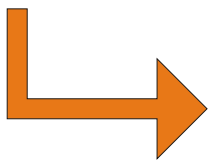


### **Cold LN Teststand:**

**Operation will  
start after this meeting**

[Some extra care concerning warm-up]

**Segmentation is a rather brutal  
technology**



**Expect problems with  
dead zones and  
pulse-shapes**

## n-type

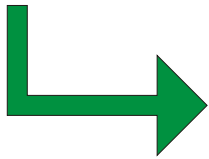
### Prototyping:

**naked crystal** [available]

**6 phi x 3 z**

[on order]

[second to be ordered soon]



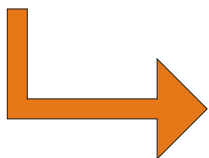
**Cold LN Teststand:**

**in Operation**

**First Spectra taken**

[Probably work on shielding needed]

**Segmentation is a rather delicate technology**



**R & D on**

**contacting/bonding**

**kapton gluing/taping**

**support**

**Expect complete prototype of detector unit by end of the 2005.**

## Summary

**Detector design available for n- and p-type.**

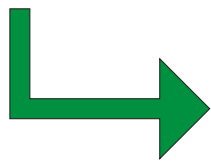
**Operated naked n-type crystal in LN.**

**Working on complete detector unit.**

**Suspension available for both kinds of detectors.**

**Expect better performance of n-type crystals.**

**Getting ready to test it.**



**X. Liu**