



# Forschungs-Neutronenquelle Heinz Maier-Leibnitz (FRM II)

## Technische Universität München



ACCESS Activity presentation  
by Jürgen Neuhaus  
General Assembly in Villigen, CH  
March 31, 2009



Reactor operating 4 cycles of 60 days per year  
[http://www.frm2.tum.de](http://www frm2 tum de)

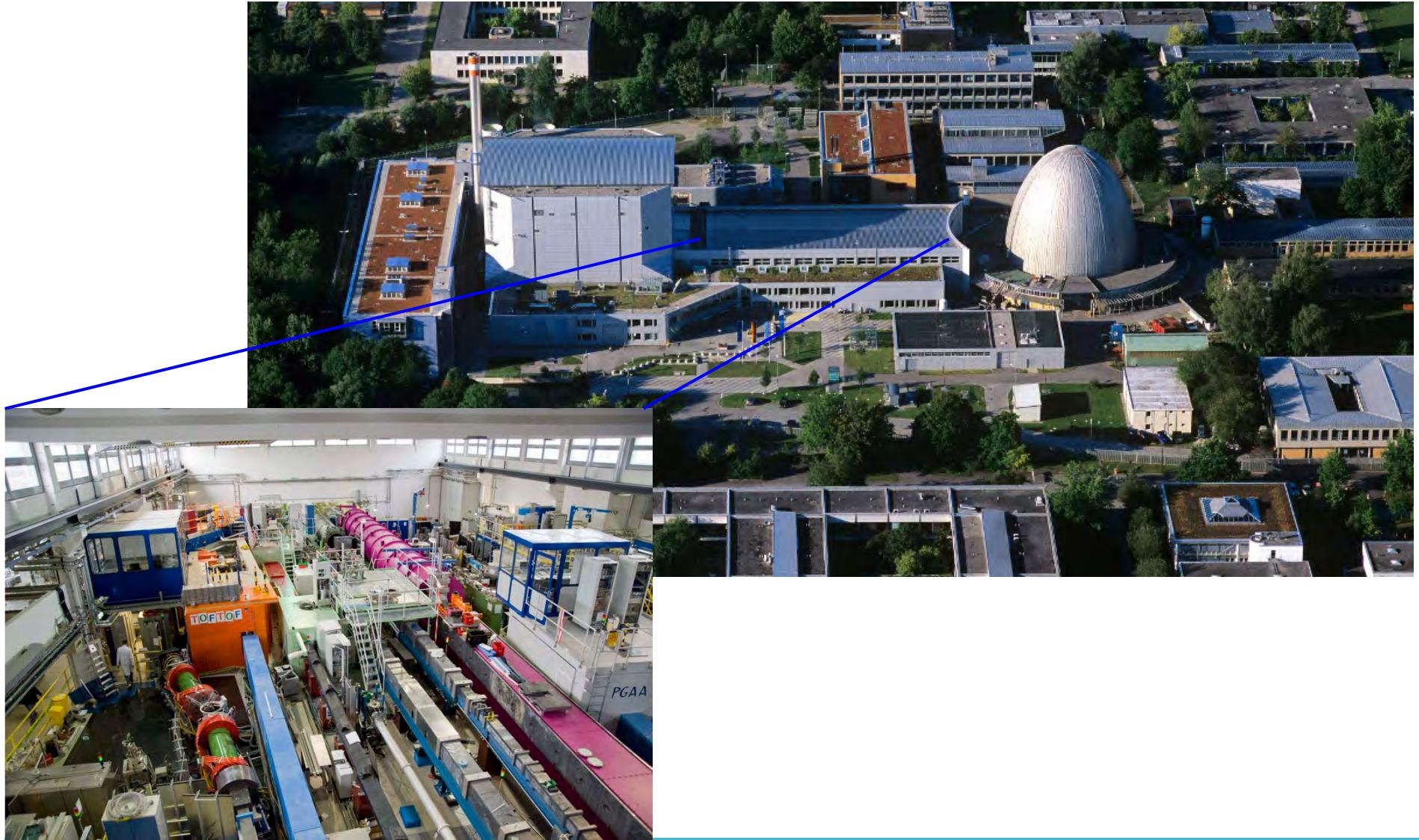


Online proposal submission twice a year, January, August  
[http://user.frm2.tum.de](http://user frm2 tum de)

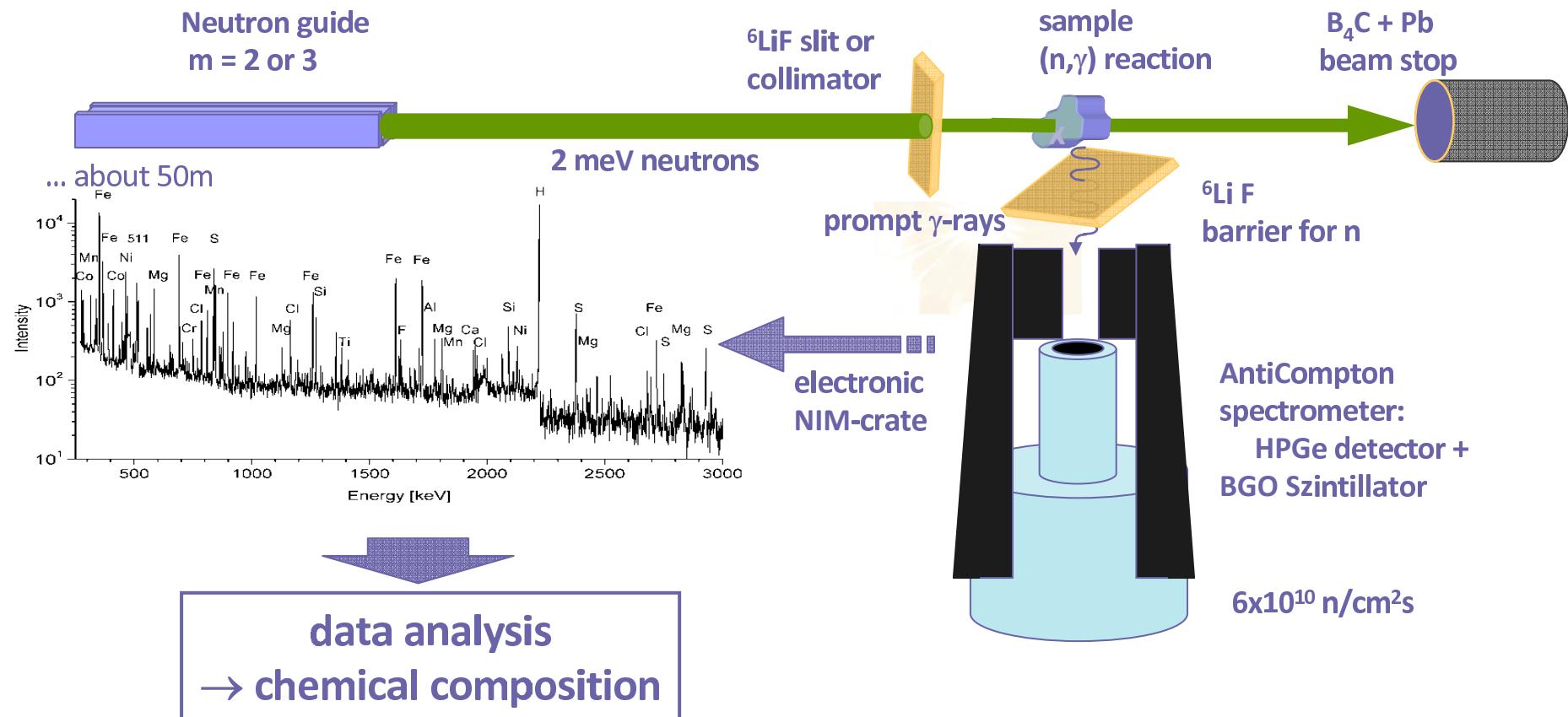


Cold, thermal, hot and fast neutron beams, positrons

18 instruments fully operational, 1 commissioning, 3 under construction



## New instruments, PGAA, PGAI (Univ. Köln, RCM TUM)



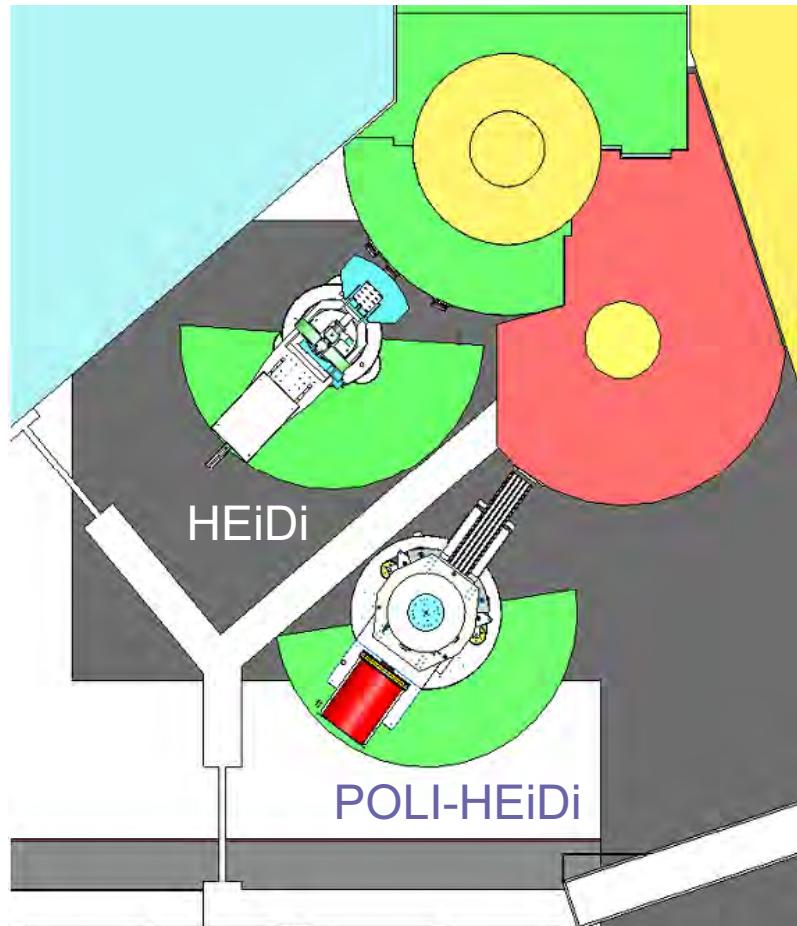
## New instruments, SANS-1 under construction



2x23m  
1x1m detector  
Variable collimation  
2 selectors

Collaboration :  
GKSS, FRM II

## New instruments, POL-Heidi

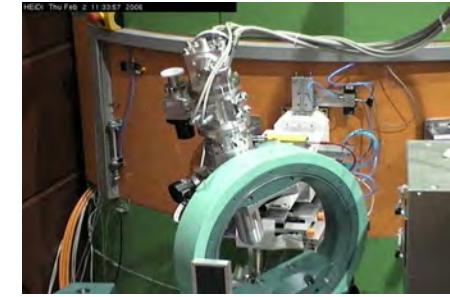


**RWTH A<sub>IX</sub>tal**

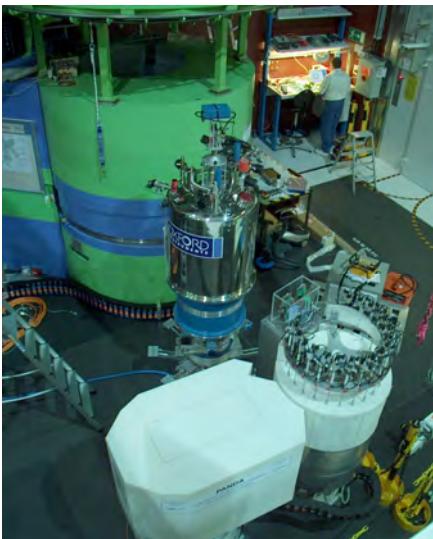
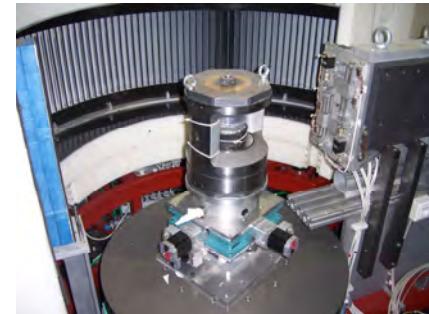
## New instruments, improved sample environment



Liquid cooling free  
cryogenic systems



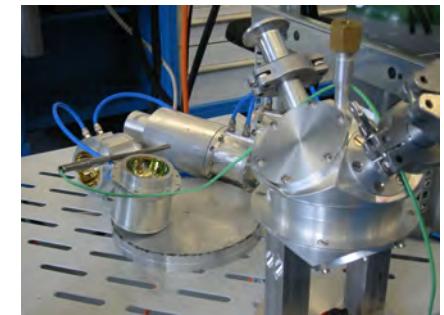
High pressure cells



High  
performance  
magnets



High temperature furnaces





## New instruments, outlook

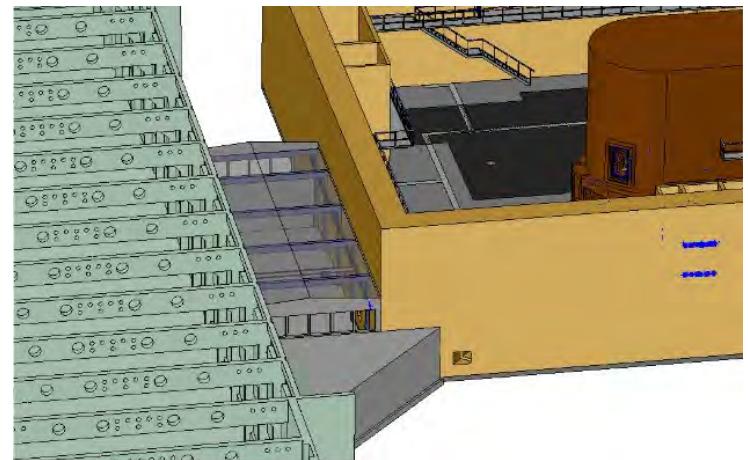
**Connection of new building (neutron guide hall east)**

**Replacement of positron source 2010**

**Extension of irradiation facilities**

**UCN source**

**New buildings (office-laboratories, neutron guide hall south)**



Instruments under construction:

- Compass, cold three-axis spectrometer for polarized neutrons (Univ. Köln, TUM)
  - Bio-diff, protein crystallography cold neutrons (FRM II, JCNS)
  - SANS-1 (GKSS, FRM II)
- 
- Maria, reflectometer high flux (JCNS)
  - TOPAS, thermal time-of-flight spectrometer (JCNS)
  - KWS-1, KWS-2, KWS-3 (JCNS)
  - Powtex, time-of flight diffraction (RWTH Aachen, Univ. Göttingen, JCNS)

## Your place in Europe, Strategy for the future

35% of European users

Looking for new users in new countries!

**Common advertisement with NMI3**

Workshops for dedicated scientific areas

No **general** collaboration with other methods required.

**Proposals submitted to FRM II  
by country**

