

Forschungszentrum Jülich

James Ritman Feb. 21, 2012

Jülich at a glance

Budget: 400 Mio. €

Third party funding: 100 Mio. € (20 Mio.€ industry)

License fees: 3 Mio. €

JARA | Jülich Aachen
Research
Alliance

staff: 4.400

scientist: 1.500

+ 900 guest scientists

from more than 70 countries

8.500 patents, 192 licenses

100 new patents per year

2-3 spin off per year

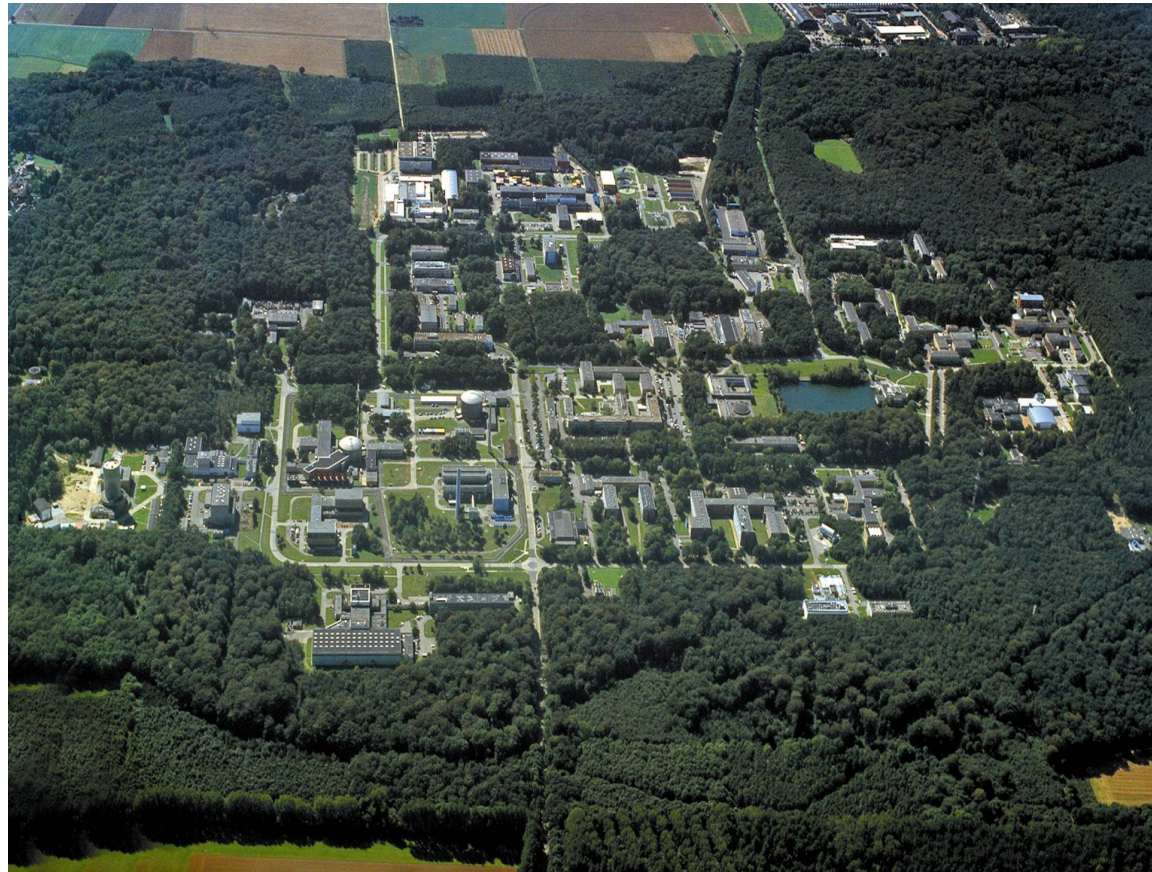
> 1.700 papers per year

> 1.200 ISI-listed

cooperation contracts with

>120 international companies

**50 internal technology transfer
projects/ spin off-funding**



Jülich Participation in this Project

ZEL (Central Electronics Institute)

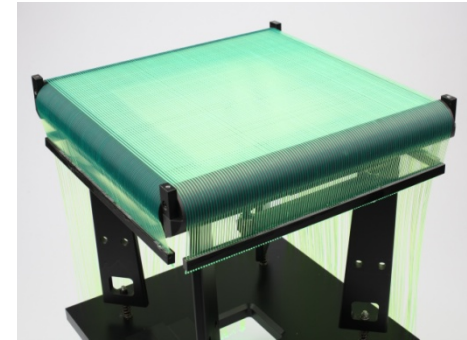
ZAT (Central Institute of Technology)

IKP (Nuclear Physics Institute)

ZEL – Central Electronics Institute

Detector system

- Neutron scattering: e.g. ^3He alternatives, n-Anger camera
- Medicine and environment: e.g. PET/SPECT



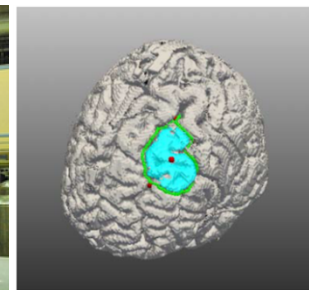
Digitization and data acquisition

- Readout systems
- digitization and trigger modules
- Serial optical data transport



Sensors and Signal Processing

- Earth observation systems
- Multi-mode image processing
- Distributed systems for real time analysis
- Electric and EM measurement techniques



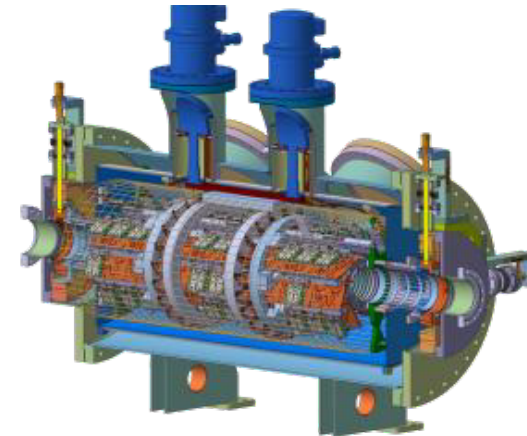
ZAT – Central Institute of Technology

Conception, development and realization of scientific technical devices and methods that are not available on the market. The competence is centered on the development, assembly and integration of large scale experimental devices, with emphasis on system-aspects.

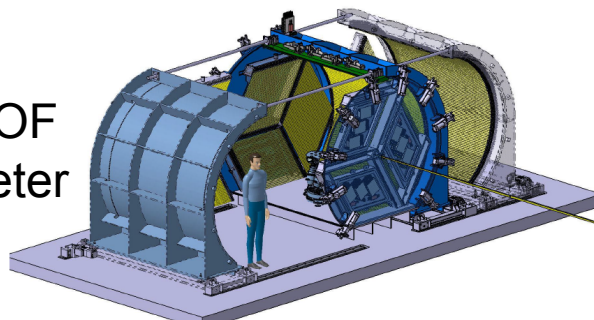
Spin-echo



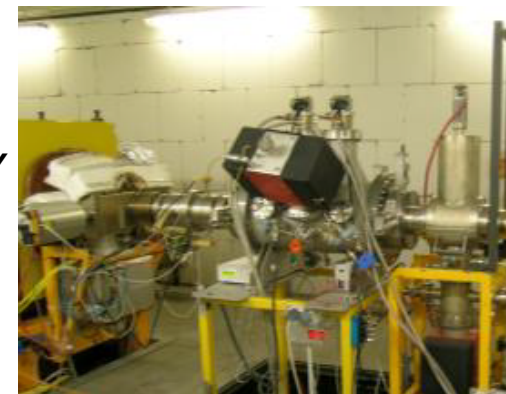
4-6 GHz
stochastic
cooling
for HESR



Neutron-TOF
diffractometer



test at COSY



IKP – Nuclear Physics Institute

Physics of the strong interaction

- COSY polarized p,d beams to 3.7 GeV/c
- Construction of HESR, 15 GeV/c Antiprotons
- Charged particle tracking for PANDA
high rate/resolution Silicon pixel/strip detectors
large volume ultra light gas-based trackers

