

News from DESY.

Joachim Mnich

Plenary ECFA
CERN, November 2011



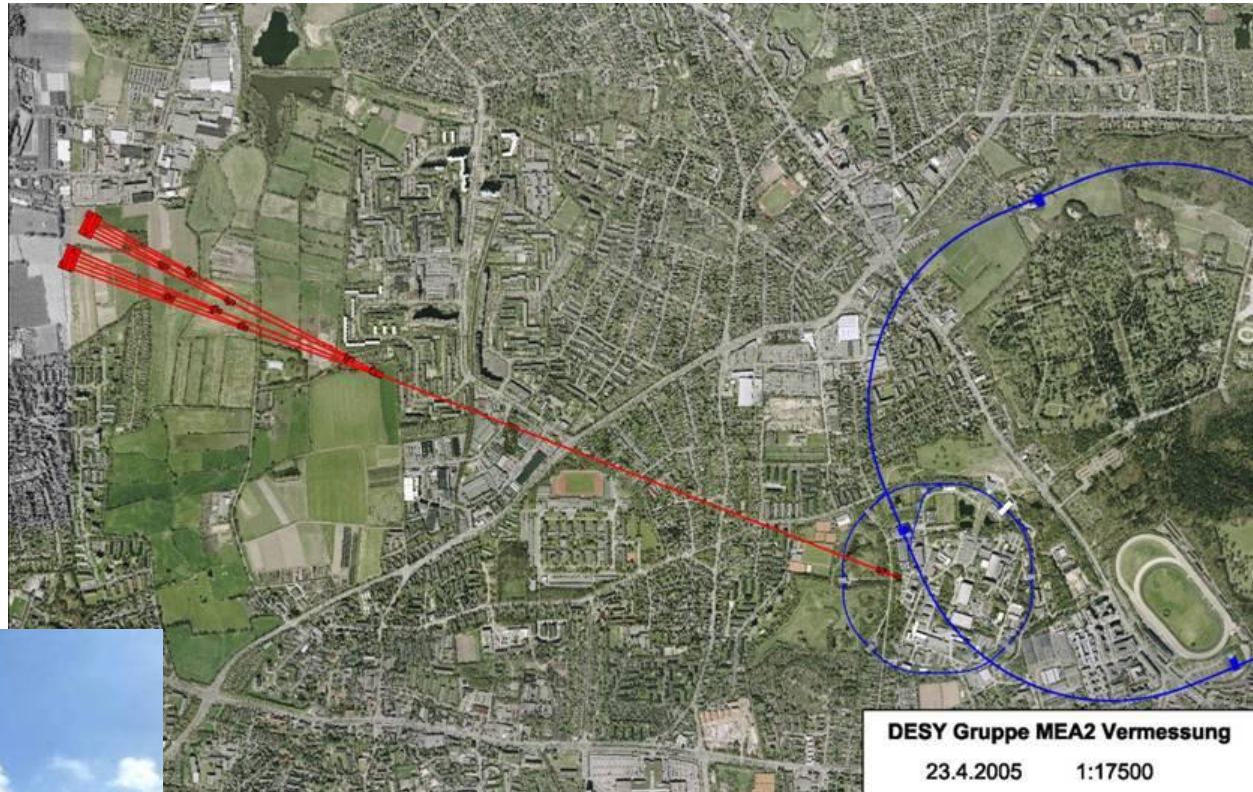
Beschleuniger | Forschung mit Photonen | Teilchenphysik

Deutsches Elektronen-Synchrotron
Ein Forschungszentrum der Helmholtz-Gemeinschaft

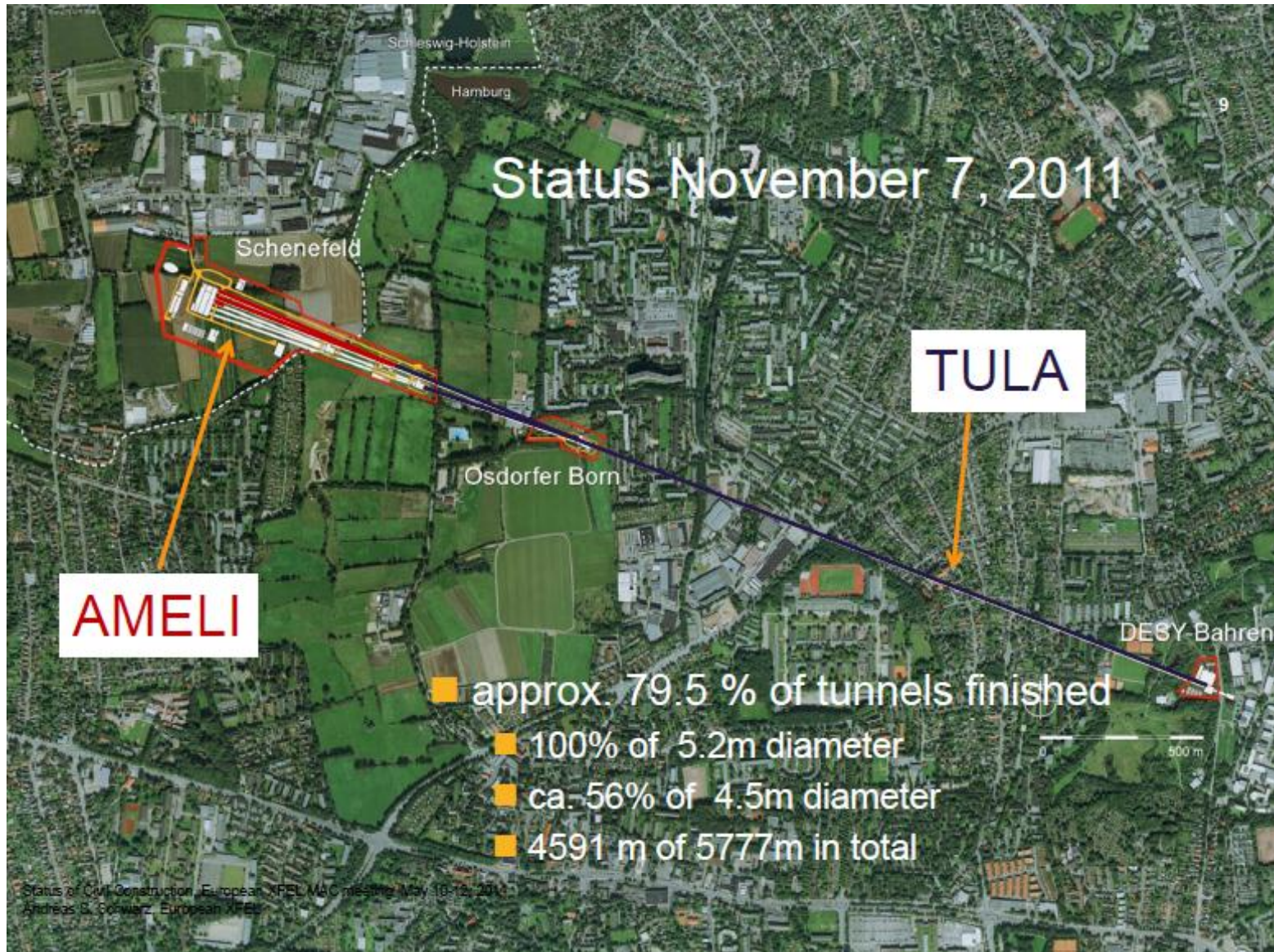


Status European XFEL

- > **Good progress**
- > **Civil engineering**
 - Injector building
 - Accelerator tunnel
- > **Fully assembled SRF prototype module at DESY**



Status Tunneling



Completion of Accelerator Tunnel



Injector Building



Injector Building



Module Production



AMTF hall at DESY

- > 1st XFEL module fully assembled at CEA-Saclay
- > Arrived at DESY on October 28
- > Installed on cryo module test bench
- > Helium transfer line sections arrived from Poland (Wroclaw)

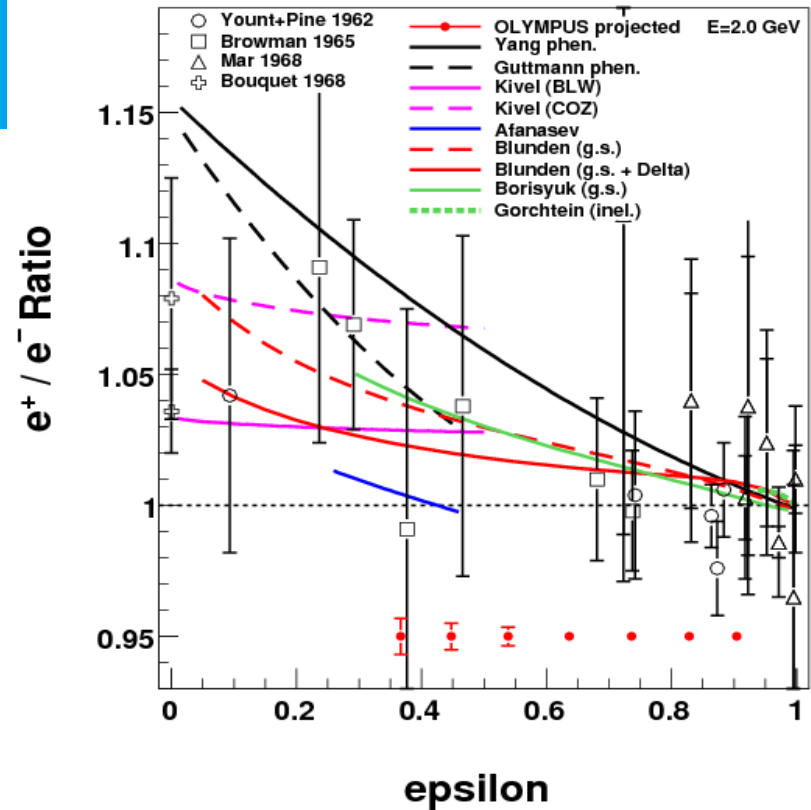
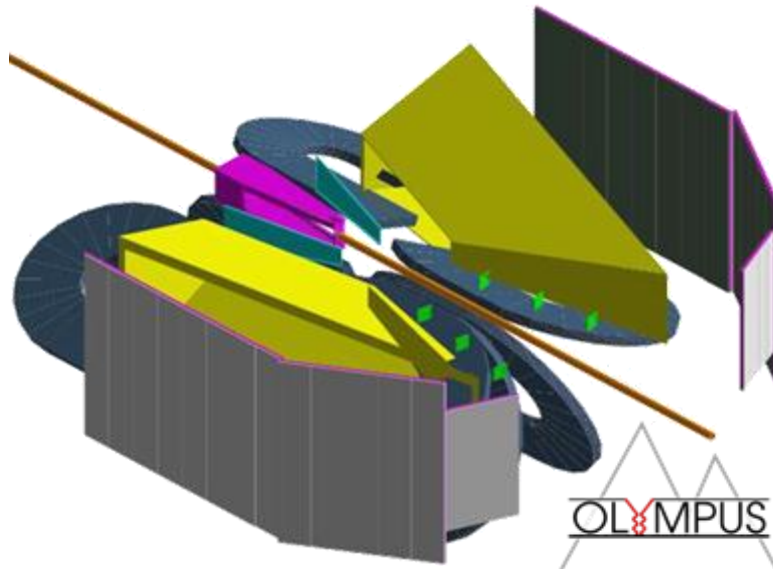


OLYMPUS Experiment at DORIS

- > Measurement of elastic cross section ratio e^+p vs e^-p
- > Use BLAST detector (MIT)

Schedule:

- > 2010 set-up experiment at DESY
- > 2011 commissioning
- > 2012 data taking (3 months)

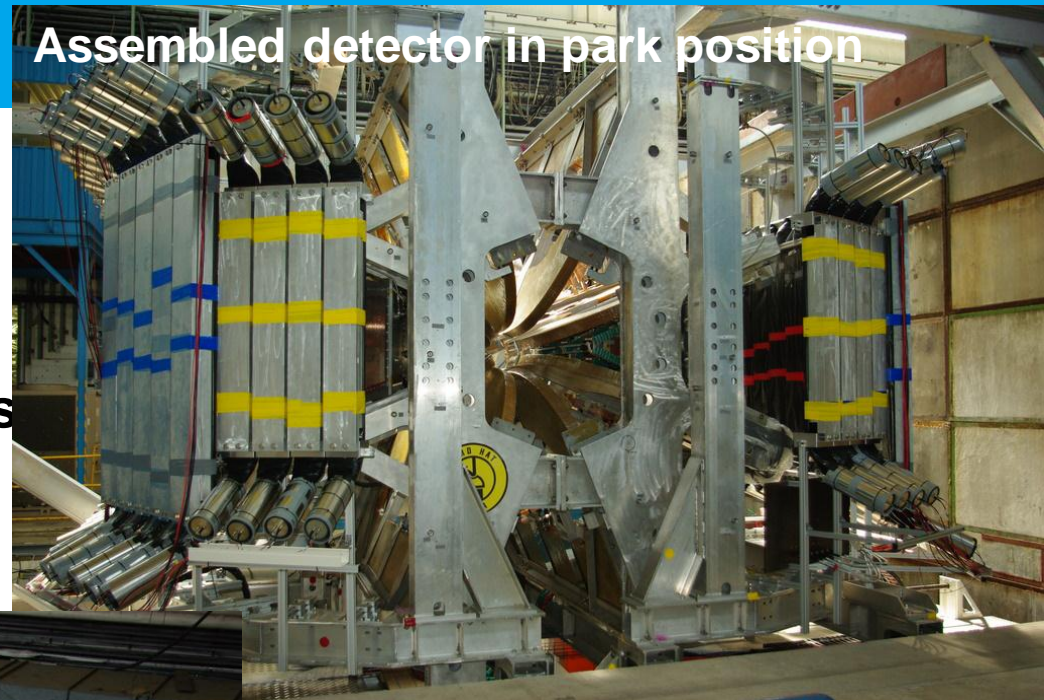


Arizona State University, USA
 DESY, Hamburg, Germany
 Hampton University, USA
 INFN, Bari, Italy
 INFN, Ferrara, Italy
 INFN, Rome, Italy
 Massachusetts Institute of Technology, USA
 St. Petersburg Nuclear Physics Institute, Russia
 Universität Bonn, Germany
 University of Colorado, USA
 Universität Erlangen-Nürnberg, Germany
 University of Glasgow, United Kingdom
 University of Kentucky, USA
 Universität Mainz, Germany
 University of New Hampshire, USA
 Yerevan Physics Institute, Armenia

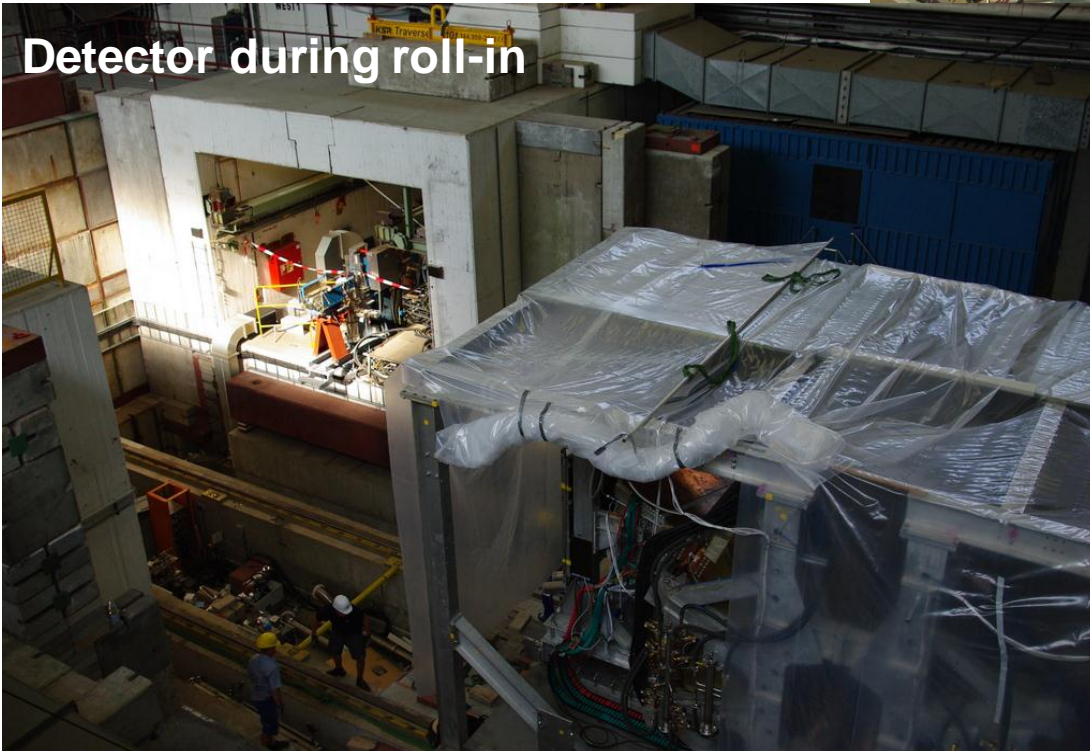


Status OLYMPUS

- > Detector rolled into beam position in July former place of ARGUS
- > Almost all detector components installed and operational

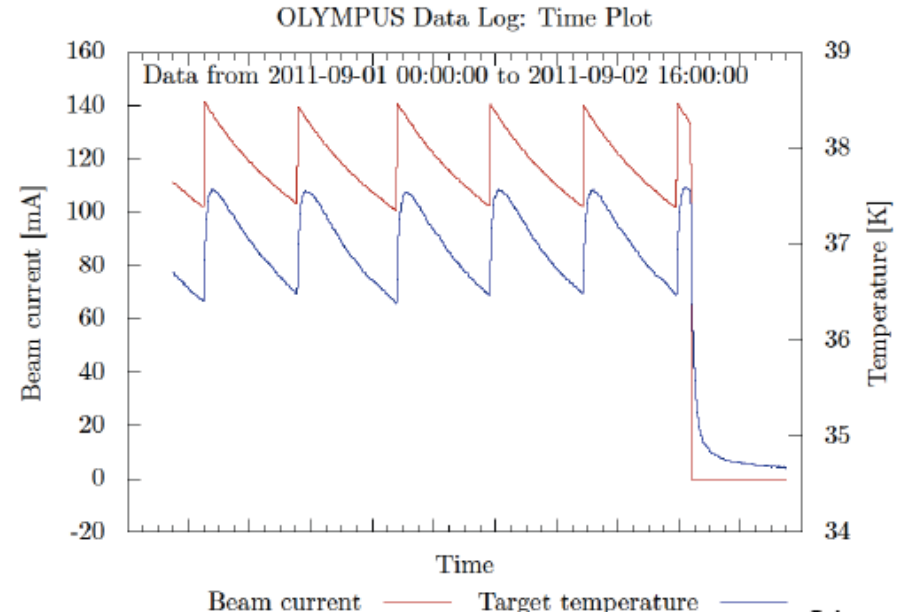
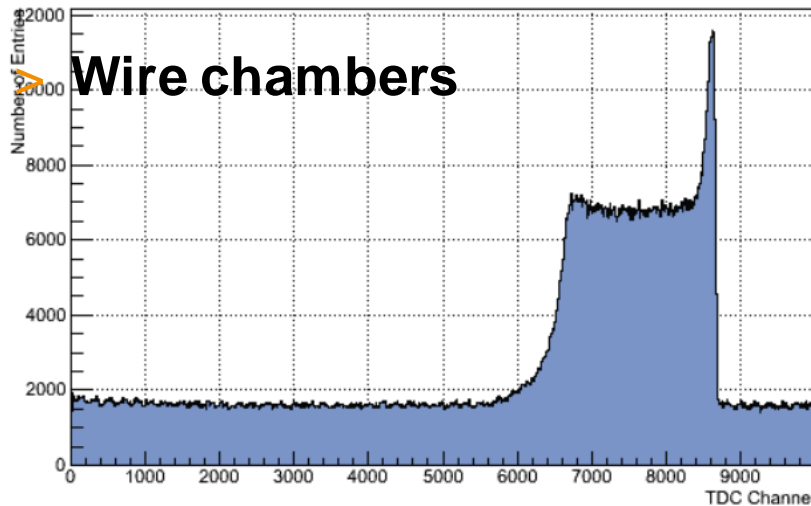
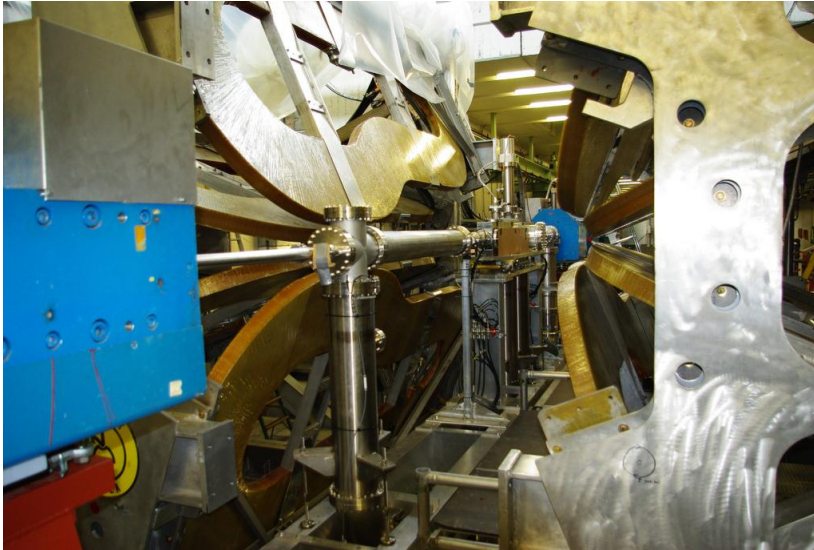


Detector during roll-in



OLYMPUS Commissioning

> Target system



OLYMPUS data taking runs

> Jan. – Feb. 2012 1st run

> Oct. – Dec. 2012 2nd run

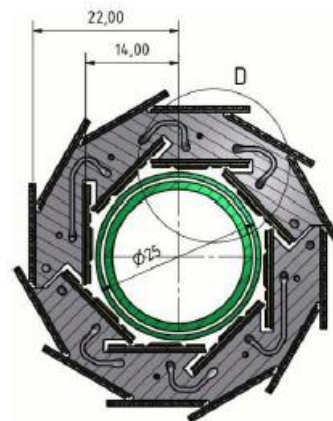
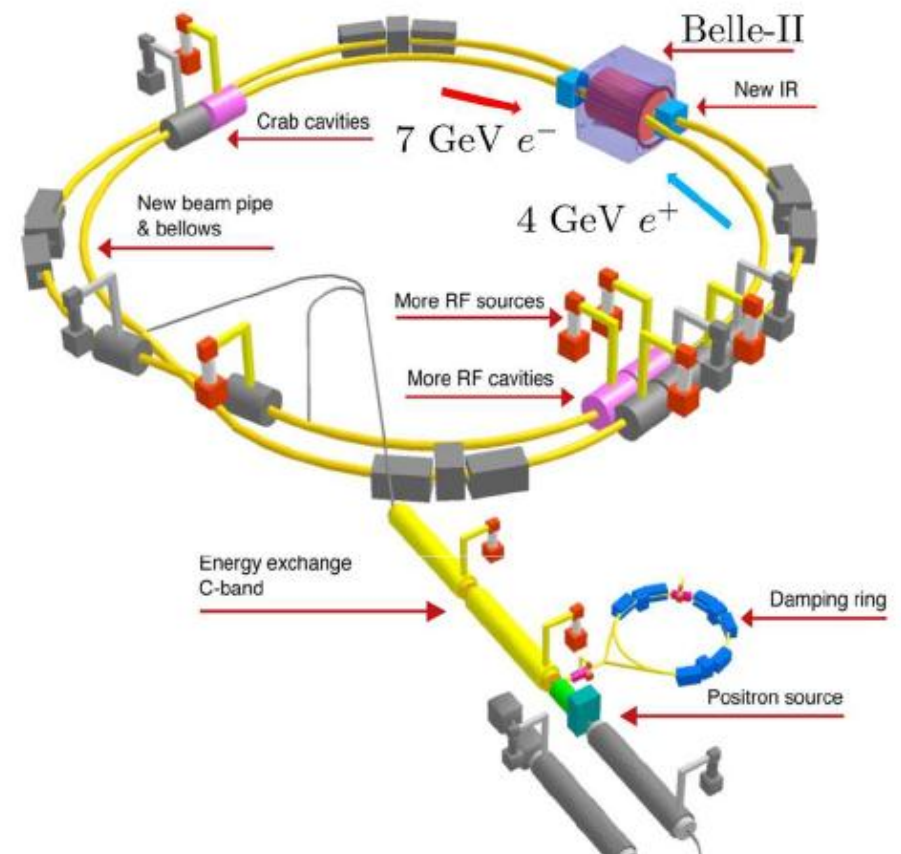
DORIS will be shut down end of 2012

BELLE II

- > DESY joined BELLE II at SuperKEKB
- > Strong German consortium to build the vertex detector in DEPFET technology
 - Bonn, DESY, Gießen, Göttingen, Heidelberg, Karlsruhe and Munich (MPI, LMU and TU)
- > DESY will contribute to integration issues
 - Mechanics, cooling, beam pipe ...



1, CERN |



8 Million pixels
Close to the IP
Low material budget

> Restructuring of research area for next funding period (2015 ff)

Structure of Matter

4 programmes:

- Particle Physics
- Astroparticle Physics
- Hadron and Nuclei
- Photon, Nuclei, Ions

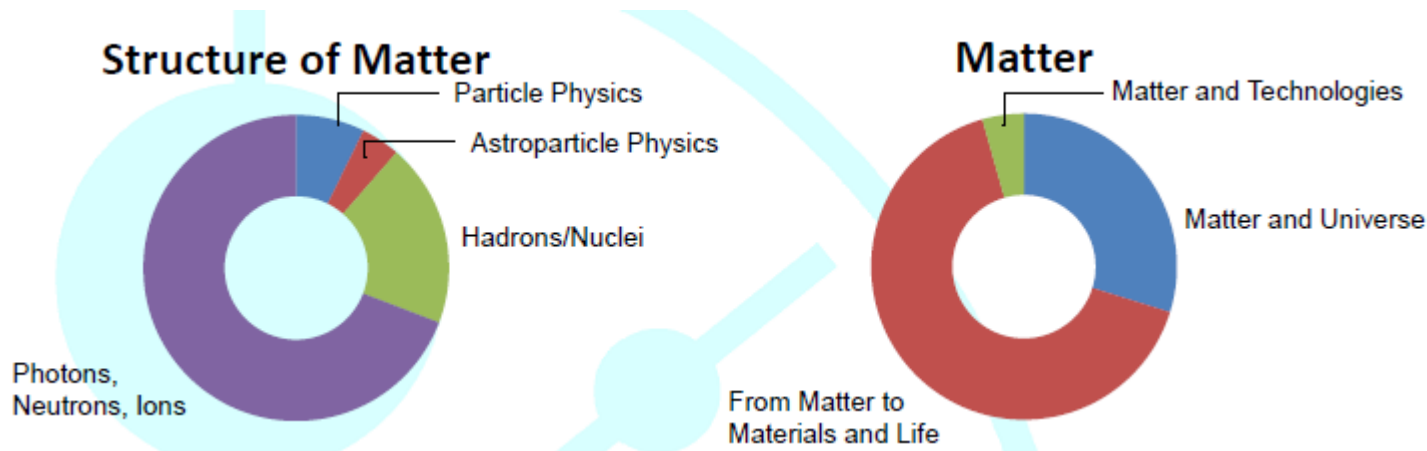


Matter

3 programmes:

- Matter and Universe
- From Matter to Materials and Life
- new** ▪ Matter and Technology
(Accelerator, Detector, Computing)

Portfolio topics accelerator, detector and computing approved



Helmholtz Alliance „Physics at the Terascale“



- > **Network of complementary excellence between**
 - 2 Helmholtz centres
 - 18 German universities and
 - 1 Max Planck-Institute

- > **Project duration: 2007 – 2012**
 - Funding approx. 5 M€/year

- > **Future funding of the project still uncertain**