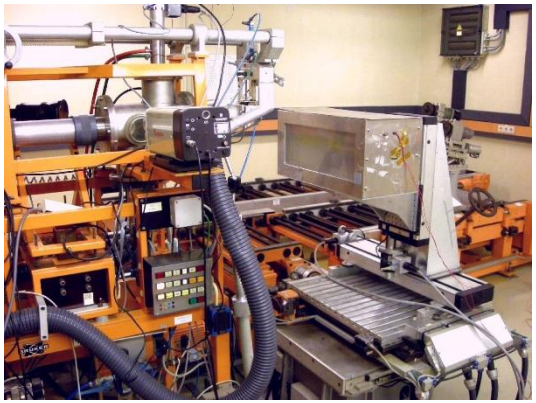
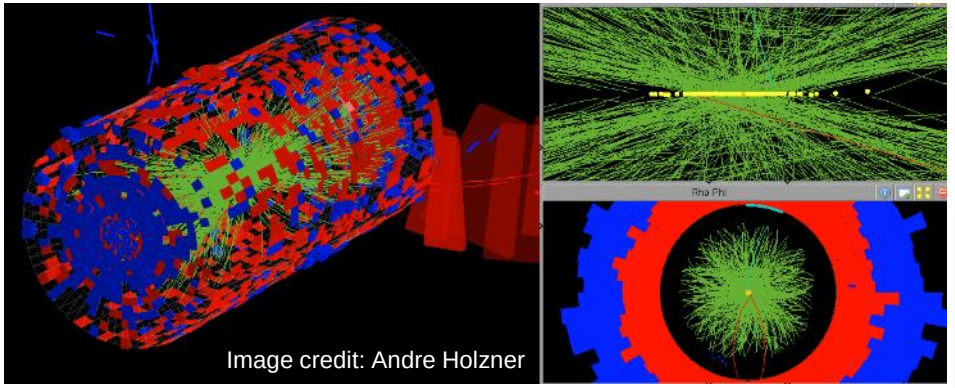
KIT TA : Scientific and administrative issues

Felix Bögelspacher, Bärbel Bräunling, Wim de Boer, Alexander Dierlamm

INSTITUT FÜR EXPERIMENTELLE KERNPHYSIK





The infrastructure

- Description on http://www.ekp.kit.edu/english/irradiation_center.php
- Cyclotron parameters:
  - Proton Energy ~23 MeV (25.3MeV at extraction)
  - Proton Current ~2.0µA (100nA - 20µA)
  - Max. Object Width 44cm
  - Max. Object Height 17cm
  - N_2-Cooling Temperature -30°C
- On average 4-5h slot every second week
  - up to 6 weeks turn-around time
- E.g., irradiating one sensor of 20mm x 20mm to $5x10^{15} n_{1MeV}/cm^2$ takes about 90 minutes.
- Min. quantity of access to be provided: 100h beam time
- Samples can be shipped to us, we irradiated and send them back
  - No visitors expected!

- Initial contact and infos: irradiations@lists.kit.edu

Scientific outcome

- Could count 56 user publications since 2008 of which 22 since 2013

17.3.2015

Publications about samples irradiated at the Karlsruhe Irradiation Facility
http://www.ekp.kit.edu/english/irradiation_center.php

Collection made to the best of our knowledge!

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[11] A. Macchiolo, L. Andricek, M. Ellenburg, H.G. Moser, R. Nisius, R.H. Richter, et al., Thin n-in-p pixel sensors and the SLID-ICV vertical integration technology for the ATLAS upgrade at the HL-LHC, Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment. 731 (2013) 210–215. doi:10.1016/j.nima.2013.04.077.

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Administration

- A big thank you to Livia, Svet and Laurent without whom we would not master the administrative work!

- Selection procedure:
  - before submitting a proposal the technical feasibility has to be discussed with the facility coordinator
  - propose to keep SharePoint and inform selection panel when an application is submitted
  - then the members of the selection panel have one week to comment
  - after that period the facility coordinator approves the application, if not rejected by the selection panel

- Application form:
  - should include sample sizes, quantities, fluences **and** material composition if other then Si or Al (activation considerations)

We are looking forward to receiving the

first application under AIDA2020

A. Dierlamm
Institut für Experimentelle Kernphysik