## "HLL Project Review"

Thursday 01 October 2009 I

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14:00 Introduction (15')

top

S. Bethke

14:15 Projects: MPP (30')	HG. Moser

14:45 Technology at the HLL (30') F. Schopper

15:15 coffee

15:45 Non-Standard Technologies and Interconnections (30') L Andricek

16:15 Projects: MPE & CFEL (45')

L. Strüder

17:00 Future Silicon Detectors (30') R. Richter

17:30 Snacks



## HLL Project Review Oct. 1, 2009

## Welcome & Introduction

• Purpose of this review:

to keep the management and the scientists of the two institutes (MPE and MPP, who founded and operate this lab) updated about the status of ongoing projects and about the future planning of projects in the HLL

- history and mission of the HLL:
  - founded in 1991, as a common semiconductor development lab of both the MPP and the MPE; location at Fraunhofer Institute in Pasing (250 m<sup>2</sup> clean-rooms).
  - mission: research, development, construction and tests of semi-conductor detectors which are needed for the projects of the two institutes which operate the HLL.
    - typical projects at MPP: precision vertex tracking detectors
      (ALEPH, ATLAS, sLHC upgrade, BELLE-II, ILC)
       Si-PM for camera of MAGIC Cerencov telesc.
    - typical projects at MPE: x-ray cameras for XMM, e-Rosita, XEUS/IXO ...

n.b.: all these projects are long-term projects (devel. & operation); current projects will last up to 2020 (devel. & construction).

- in 2001 the HLL moved to a new site on the Siemens plant in Neuperlach, where we (i.e. the MPG) rent a large amount of lab ( 600 m<sup>2</sup> class-1 clean-rooms) and office space.

- Since 2003, close co-operation with PNSensor GmbH, a company founded by and with personnell out of the HLL. Cooperation agreement between MPG, MPP, MPE and PNSensor regulates and allows
  - sales and marketing of surplus and overrun seminconductor structures (basically Si drift diodes used for x-ray lab detectors)
  - "hiring" of PNSensor expert personnell to participate in institute's projects

PNSensor rents and operates their own office and lab space at Siemens in Neuperlach.

- since 2006: significant x-ray detector developments for material sciences (XFEL; CFEL)

- current stock of personnell (end of 2008):
  - MPP: 13 "Planstellen" (scientists, technicians, admin/secret.)
     ~4 students, guests, apprentice
  - MPE: 6 "Planstellen" plus 11 positions from 3rd party project funds ~6 students, apprentice
  - PNSensor: ~28 (scientists, technicians, admin)

- management:
  - 2 responsible directors (R. Genzel, MPE S. Bethke, MPP)
  - 2 laboratory heads (L. Strüder, MPE H.G. Moser, MPP)

• finances (2008):

- overall incl. personnell, rent, operation: 7000 kEuro

MPG	MPP	MPE
1817		
	813	422
	357	680
	100	663
	595	777
	1817	813 357 100



