9th Beam Telescopes and Test Beams Workshop



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Lecture: Silicon Processing Techniques

Monday, 8 February 2021 13:00 (45 minutes)

We will give an overview of what kind of silicon processing techniques exist and how they can be applied to produce silicon radiation detectors. After an introduction into microsystem technology and its equipment, we will discuss the main steps of how to process a simple planar radiation detector. The differences to conventional, industrial CMOS processes will be pointed out in particular. We will end with special cases of radiation detectors like 3D-sensors, active edges and ELAD: which challenges are present and which technologies are needed for their realisation.

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