## International Workshop on Semiconductor Pixel Detectors for Particles and Imaging (PIXEL2014)



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## **Overview of HV/HR-CMOS Pixel Sensors**

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HV-CMOS sensors are presently considered for the use in Mu3e experiment, ATLAS and CLIC. These sensors can be implemented in commercial HV-CMOS processes. HV-CMOS sensors feature fast charge collection by drift and high radiation tolerance. The sensor element is an n-well diode in a p-type substrate. This talk will give the overview of the detector- and readout architectures, such as capacitively coupled pixel detectors, segmented strips or 3D-integrated HV-CMOS sensors. The detector improvements such as the use of substrates with higher resistivity (HV/HR-CMOS sensors) or additional implants will be discussed as well.

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