

Challenges for the Adaptive Gain Integrating Pixel Detector (AGIPD) design due to the high intensity photon radiation environment at the European XFEL

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This talk will outline the European XFEL and its unique challenges for detector design due to its radiation environment.

Radiation damage will be done mainly by low energy photons, but singular high intensity events prove to be evenly challenging.

The talk will discuss briefly the main effects of surface damage relevant for the AGIPD.

The talk will then discuss the ASIC and layout of the detector and some results on measurements of its radiation hardness.