

## Development of HPK n-in-p Pixel Sensors for HL-LHC

*Tuesday, September 3, 2013 11:00 AM (20 minutes)*

We, Hamamatsu Photonics K.K have been developing high radiation-tolerant n-in-p planar pixel sensors which can be used for HL-LHC.

N-in-p planar pixel sensor is one of candidate for HL-LHC, and has advantages of high radiation-tolerance with reasonable price (compared with 3D sensor or diamond sensor).

On the other hand, n-in-p planar pixel sensors also have some issues to be solved such as "slim edge/protection for edge HV sparking/decrease of efficiency after irradiation". We are now trying to solve these issues by wafer level process, which is important for mass production.

In this symposium, we show our progress of development, mainly about slim edge.

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**Track Classification:** Pixels (including CCD's) - Charged particle tracking