Tipp 2014 - Third International Conference on Technology and Instrumentation in Particle Physics



Contribution ID: 454 Type: not specified

## The Digital Photon Counter (DPC, dSiPM) –a disruptive technology for application in medical imaging, high energy physics and beyond

Wednesday 4 June 2014 15:00 (30 minutes)

The lecture will introduce the concept of disruptive technologies using the example of the Digital Photon Counter (DPC, dSiPM) developed at Philips since 2004. The major characteristics of disruptive technologies will be worked out and examples given. As the development of the technology at Philips was triggered by its potential application in medical imaging, in particular in Positron-Emission-Tomography (PET), the benefits of using DPC in PET will be explained.

The concepts of analog and digital SiPM will be compared and the advantages of the early digitization concept will be highlighted in particular in view of industrial applications. One of the most important prerequisites for this is scalability, so special focus and attention will be given to this aspect by introducing the Philips digital systems concept. The question of how to bring such a technology to market and how to define the product will also be discussed. First application examples will be shown and a brief outlook on future developments will be provided.

Presenter: Dr HAEMISCH, York (Philips Technologie GmbH)

Session Classification: Network Session