



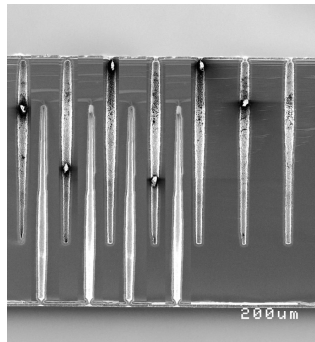
Developing and exploiting new particle physics technology

2010 **ATLAS-FP**

Edgeless Pixels

Radhard

High Resolution



## 3D- detectors

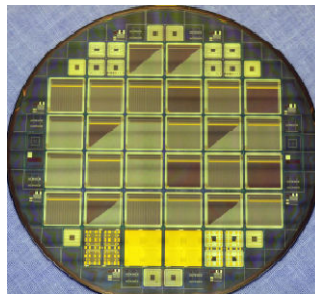
Factor of 10 improvement in radiation tolerance

2015 **LHC Upgrades**

High Speed

Low Power

Radhard Pixels



## MCMD

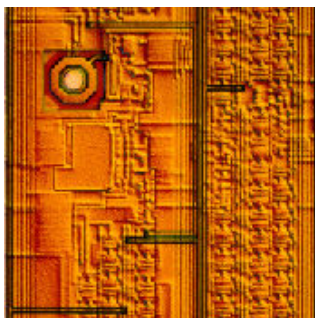
Reduced material and build complexity with increased integration

2020 **CLiC**

Low Occupancy

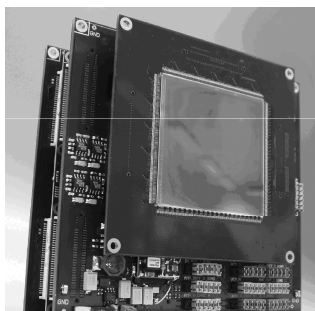
High Speed

Low Mass



## Medipix

Advanced high-speed pixel readout



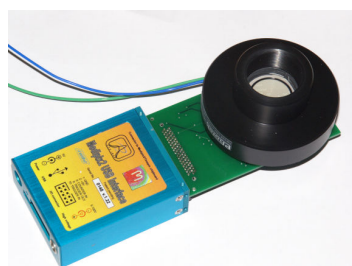
## Active Pixel Sensors

Intelligent, low-mass pixel sensors

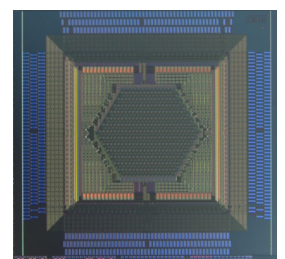
## Knowledge Transfer



Security



Cell Imaging



Neural engineering