

Detector status LEPCOL

- Started with a single chip TPX3
Build a very nice small device, tested in laser setup
and test beam in Bonn
Results are well understood and submitted to NIM June 2018

Performance of a GridPix detector based on the Timepix3 chip

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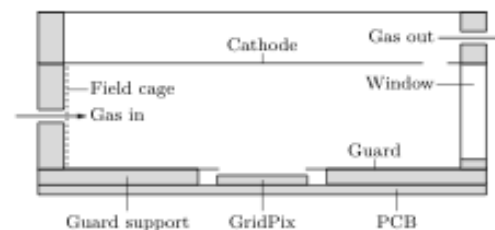
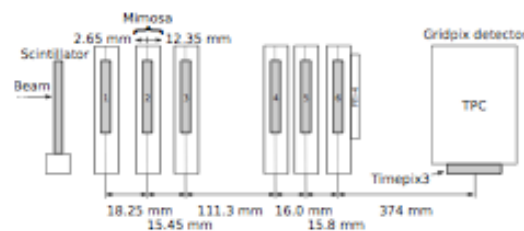
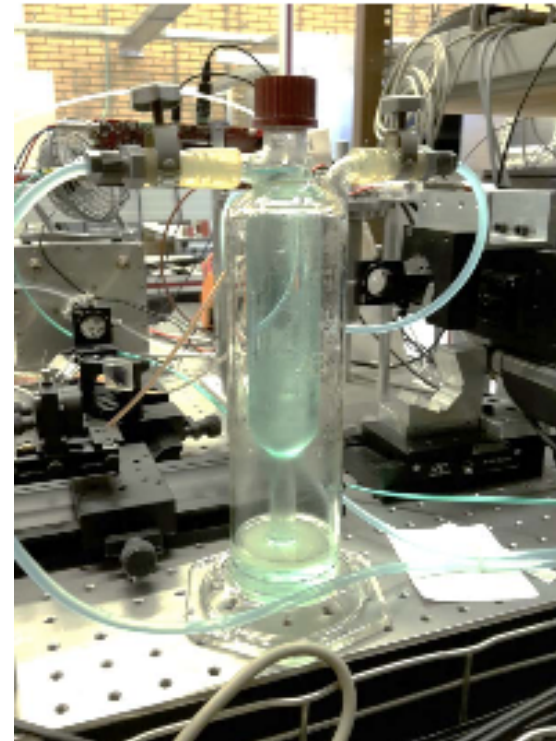
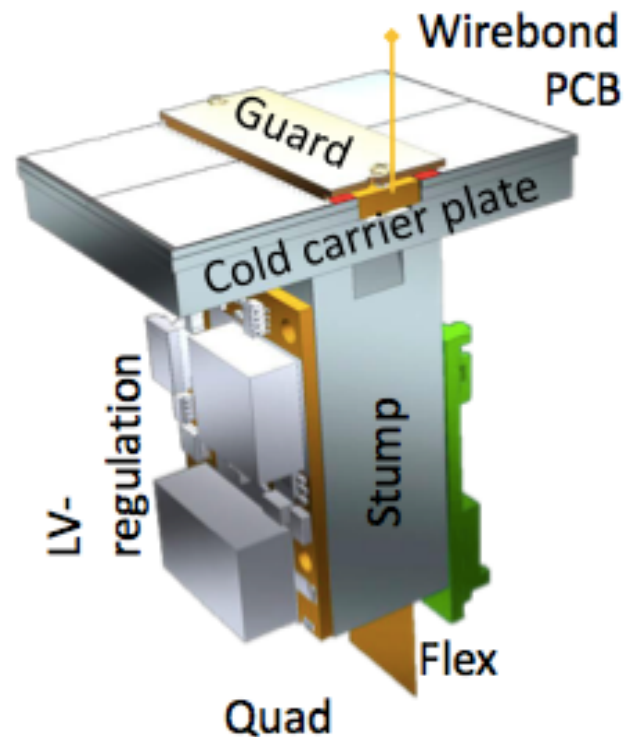


Figure 1: Schematic drawing of the GridPix detector.



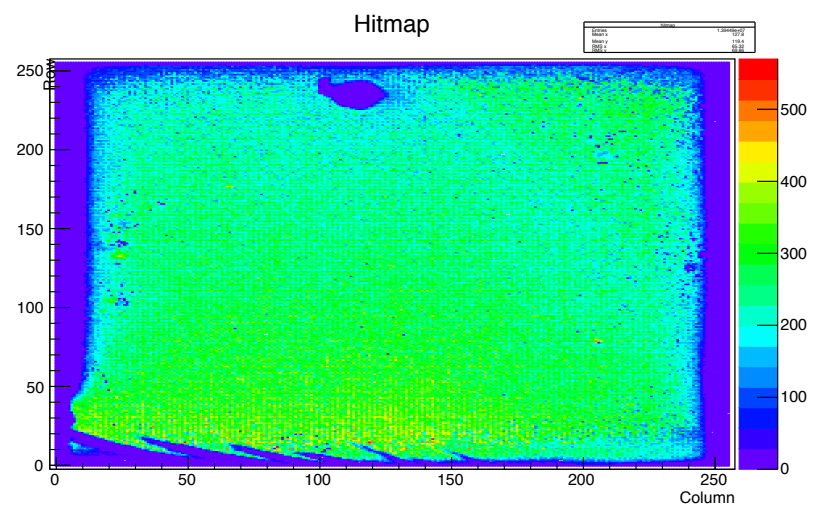
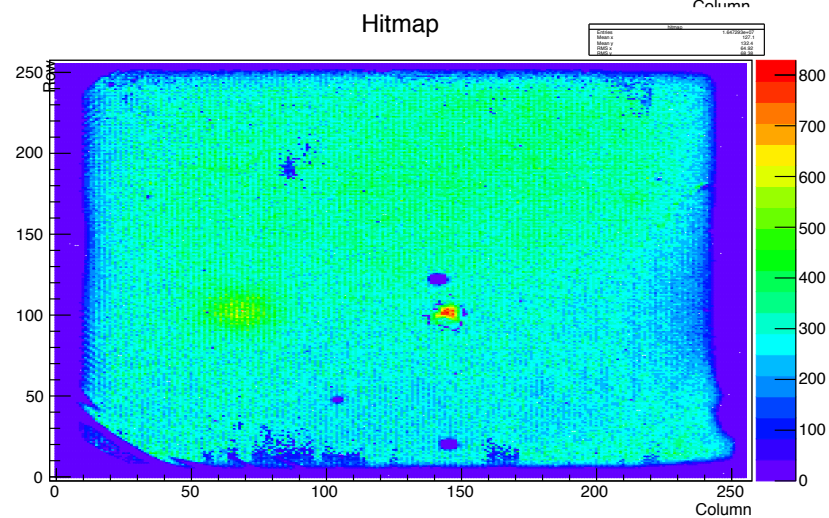
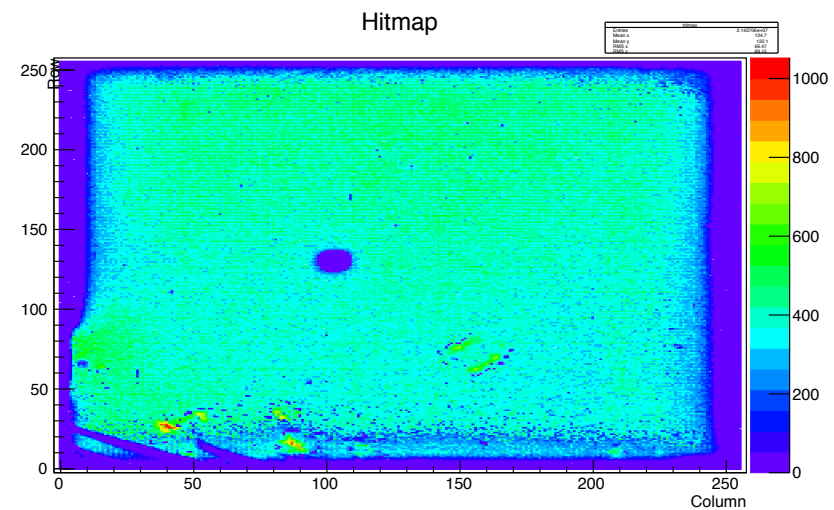
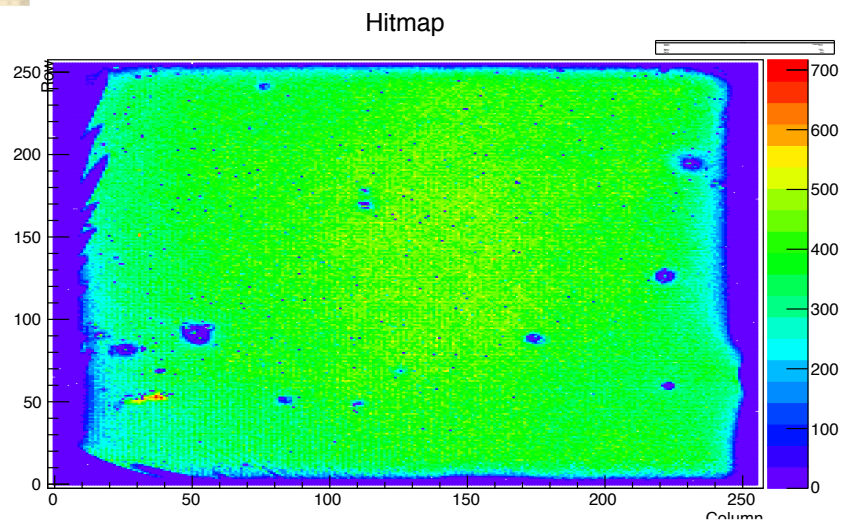
Detector status Quad

- Fully functional Quad is built test box with cooling, HV controls and DAQ
Now under test in laser setup
- Next steps:
 - DAQ training; laser data taking scans; data analysis
 - Possible test beam September



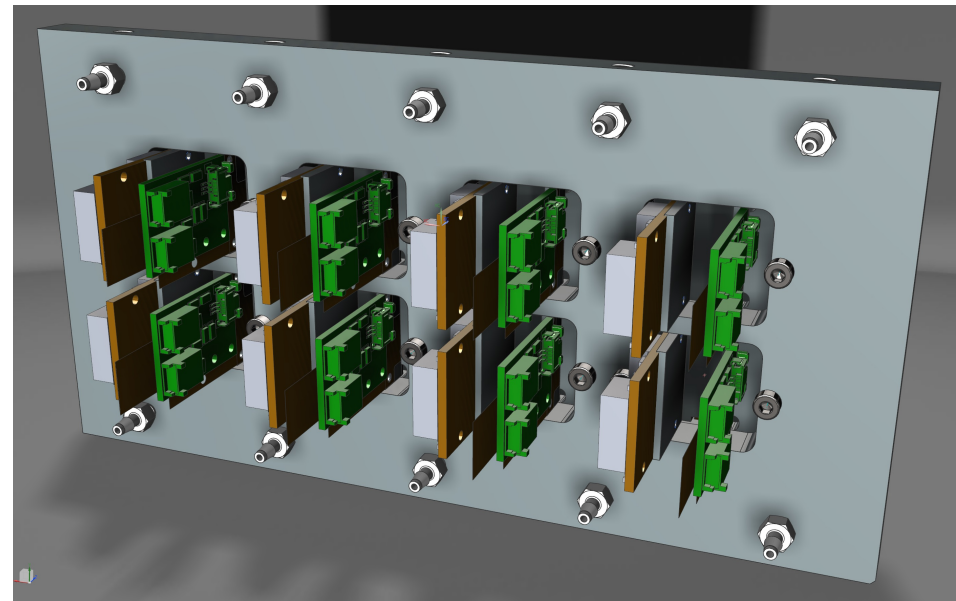
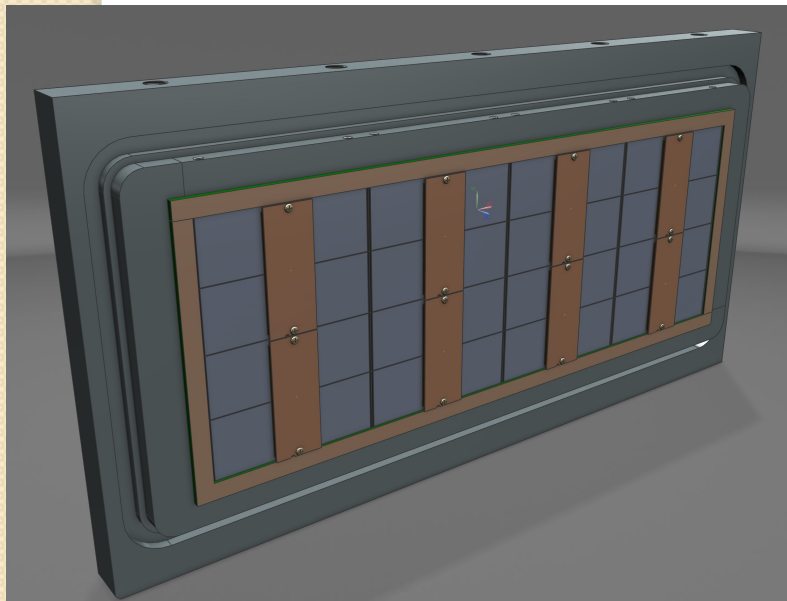
Quad Hit maps

Sr source
300 V



Detector planning Quads

- Objective is to realize 8 quads
 - ET: Flex 10 +5 Bonn plus multiplexer and PCB in house
 - MT: Design work being finalized
 - TPX3 chips with grid: production started Bonn
- Next steps:
 - start with just one Quad then add more
 - laser data taking scans; data analysis
 - Possible test beam September or December



Detector planning OPP Quads

	OPP-Statusverslag June 5, 2018
Project: LepCol QUAD, Gerhard Raven and Fred Hartjes	

Manpower planning QUAD/Lepcol 2018

task	person	start month	dur. ET (wk)	dur. MT (wk)	dur.var (wk)
production 15 PCBs	industry	jan-18			20.0
manufacturing QUAD mechanics	Oscar van Petten	jul-18		4.0	
QUAD assembly	Fred H	jul-18			pm
wire bonding	Joop Rovekamp/ Dimitri	aug-18		2.0	
production central guards	Pascal	jul-18	1.0		
design multiple QUAD testbox	Auke K/Fred H	jun-18		3.0	
production mult. QUAD testbox	Oscar van Petten	jun-18		6.0	
programming concentrator	Bas / Pascal	jul-18	4.0		
total			5.0	15.0	20.0