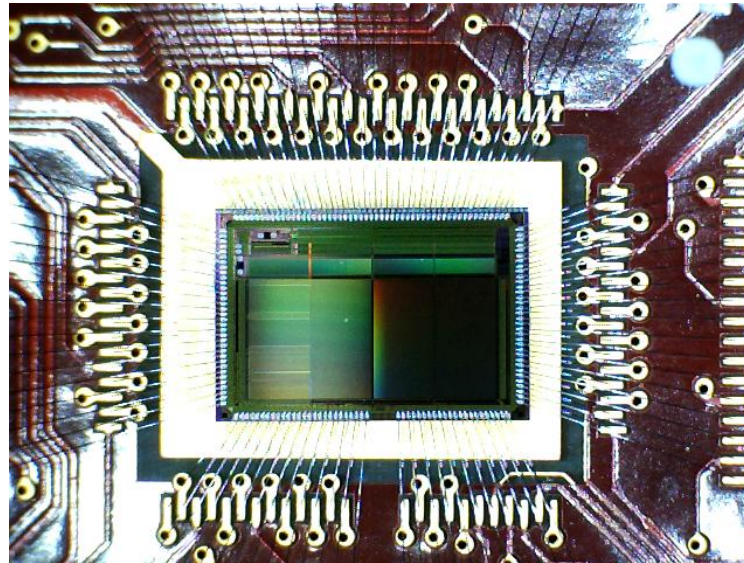


Arachnid

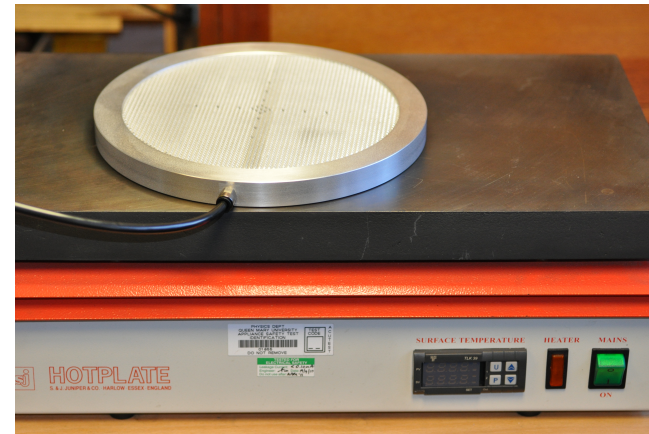
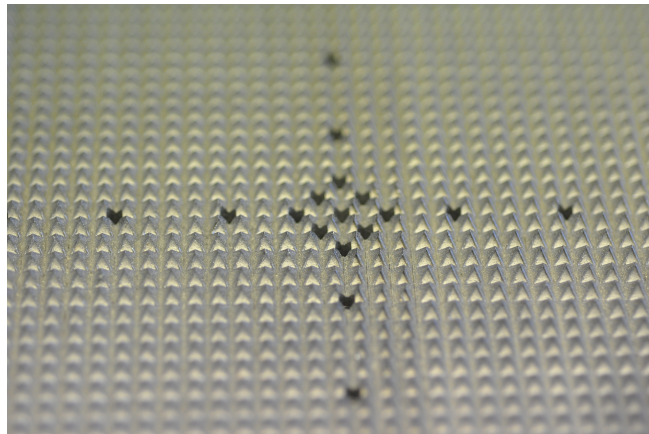
UK Programme

- Outline:
 - Mechanics
 - Sensor Bench tests
 - 2012 Test beams



Mechanics

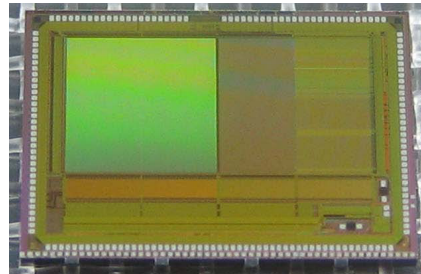
- John and Fred are investigating possible materials that could be used to build a prototype of the cones and space frame.
 - Would like to build a viable prototype soon.
- Developed jigs for die picking module sized sensors of thin silicon. Will test these in the next week or so.
 - Initial prototypes worked well, so we don't expect any surprises.



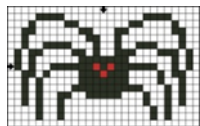


Arachnid Collaboration

- CMOS MAPS R&D programme
 - Continuation of the SPiDeR programme
 - Birmingham, Bristol, Daresbury, DESY, QMUL, RAL
 - Targeting SuperB and ALICE projects as well as generic MAPS development.
 - Focus is on
 - Evaluating the performance and radiation hardness of an INMAPS chip: Cherwell, including design features relevant for SuperB.

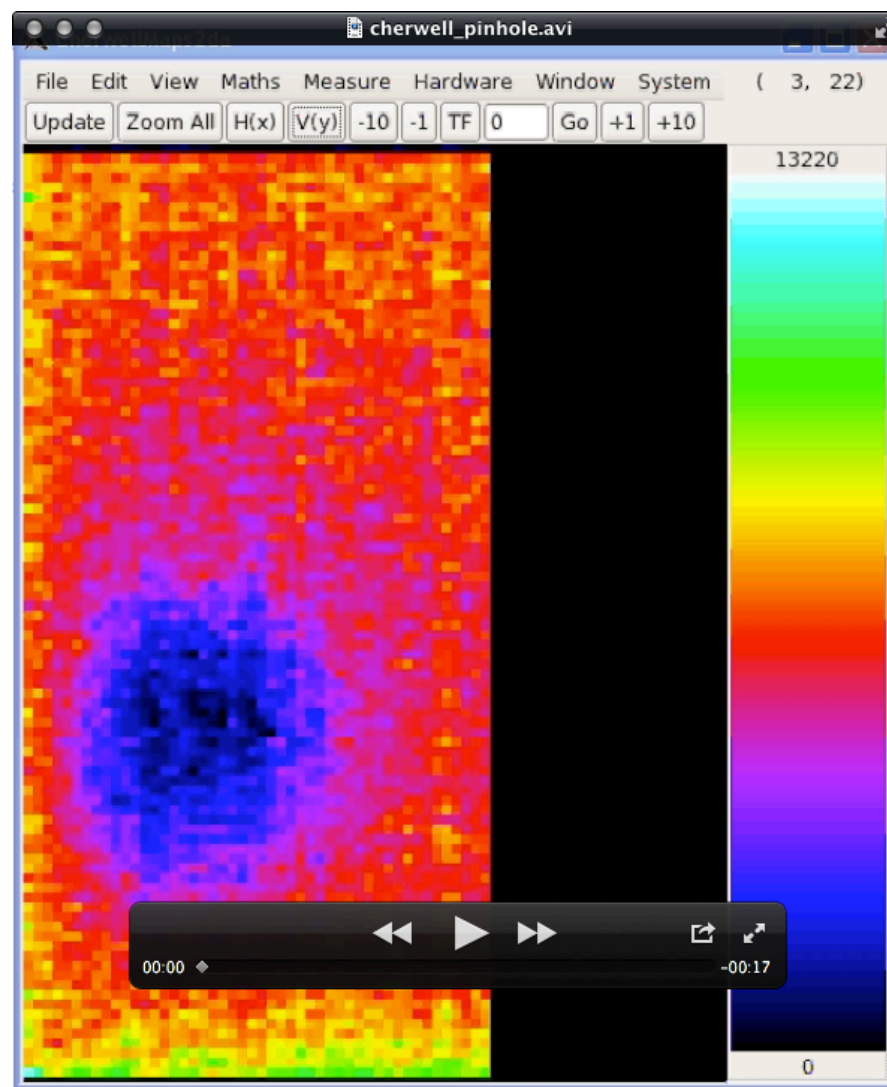


- Designing a chip specific for vertexing
 - Team now fully in place.



Bench tests

- Firmware ready for bench-tests reading out FORTIS pixel and strixel sides of Cherwell.
- Expect to have on chip ADC functionality ready soon.
- Then will enable the Cherwell pixel functionality for further tests.





Beam Tests

- Planned proton (CERN) and photon (RAL) irradiation programmes during 2012, will start as soon as we have full functionality to test chips in firmware.
 - 3 splits for the Cherwell chips, on standard and hi-res substrates.
- Also plan to perform TPAC irradiation to compare 3T vs. 4T radiation hardness.
- Later in 2012: include electron test beam (DESY) in the programme.