

New structures

3D

CNM and FBK working well on ATLAS IBL

TB of FE-I3 and FE-I4 underway with non and irradiated devices

Issues to cover:

Long term stability of 3D detector operation

Annealing of device

Edge treatment to get thin/edgeless device

Structures for testing before FC – poly biasing CMS design, extra metal layer

More data at highest fluences

Pixel activities

Some issues that we could look at:

TSVs could do with some extra effort

MCM_D or double metal layers on detectors for decoupled sensor/ASIC layout

Options on different pixel implant size w.r.t. ASIC size

Low cost bumps

Understand closest FC positioning of ASICs on sensors