

DR&D plans regarding Pixel Detectors

- Discussed extensively with Stan and Nikhef management
 - Silicon Hybrid pixels & Monolithic (recent development)
 - *Manpower redirected and focus*
 - *Important for LHCb, ALICE and Atlas programs*
 - No plans for TPX4 gaseous based detectors
 - *Strategy clear since 2017*
- Fast timing detectors:
 - *Martin vB (coord), Martin F, Kazu, Hella S, Kevin H, Robbert G, Daniel, New hire*
 - ASIC design (eg TPX4):
 - *Martin vB (coord), Vladimir G, Arseniy V*
 - *Collaboration with CERN Medipix team*
 - SPIDR4:
 - *Martin F (coord), Martin vB, Bas vdH, Henk B, Vincent vB, ASI (Bram, Jord, Kia,...)*
 - ***Will be reported today by MF***

Nikhef DR&D activities

Smart & Fast pixel activities in the near-midterm future:

- Testing TPX4 (with SPIDR4)
- Improving TPX4 - submit 2nd chip
- Debug SPIDR4 and extend functionality
- Hybrid semi-conductor sensors (with TPX4): thin Silicon, LGAD, 3D,
- Development of fast timing blocks: better than TPX4 (< 50 ps)
- Two Photon Absorption laser & beam telescope
- MAPS development: for ALICE LS3 and later for LS4
- MAPS testing