



14:00 – 16:00 TSR

The readout cell of Topix3

Report on Topix3

Activities on sensors. Activities on AI cables. D. Calvo, Torino 15'

Update on the Tracking Station data analysis

Updated full-scale count rate studies

discussion

16:00 - 16:30 coffee

16:30 - 18:30 TSR

discussion: Towards the MVD TDR

Th. Kugathasan, Torino 15'

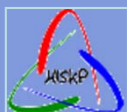
G. Mazza, Torino 15'

S. Bianco, Bonn 15'

Th. Würschig, Bonn 15'

L. Schmitt, GSI 15,

K-Th. Brinkmann





Technical Design Report for the:

$\bar{\text{P}}\text{ANDA}$
Micro Vertex Detector

(AntiProton Annihilations at Darmstadt)

Strong Interaction Studies with Antiprotons

$\bar{\text{P}}\text{ANDA}$ Collaboration

Contents

Preface	v	3.3.3 Small Prototype	5	4.2.3 Local Pixel Disks Support / Cooling	6
1 Introduction	1	3.3.4 Full-Size Prototype	5	4.2.4 Local Strip Barrel Support / Cooling	7
1.1 Physics Motivation	2	3.3.5 Production	5	4.2.5 Local Strip Disks Support / Cooling	7
1.2 The PANDA Experiment	2	3.4 Hybridisation	5	4.3 Additional Disks	7
1.3 MVD Layout	2	3.4.1 Module Design	5	4.4 Cooling	7
2 Pixel Part	2	3.4.2 Lab Tests/Interconnection Studies	5	4.5 DCS	7
2.1 Module Concept	3	3.4.3 Full Prototype	5	4.6 Mounting	7
2.2 Sensor	3	3.4.4 Testing	5		
2.2.1 Single Chip Sensor	3	3.4.5 Production (incl. Q/A)	5		
2.2.2 Fullsize Prototype Sensors	3	3.5 Front-End	5		
2.2.3 Technology choice Epi vs. Oxygen	3	3.5.1 Requirements	5		
2.2.4 Production	3	3.5.2 Options	5		
2.3 Front-End ASIC	3	3.5.3 Choice	5		
2.3.1 ToPix3	3	3.6 Controller Chip	5		
2.3.2 Fullsize Prototype	3	3.6.1 Design	5		
2.4 Hybridisation	3	3.6.2 FPGA Prototype	5		
2.4.1 Bump Bonding	3	3.6.3 Tests	5		
2.4.2 FE Wafer Thinning	3	3.6.4 ASIC Design	5		
2.4.3 Alternative Technologies	3	3.6.5 Tests	5		
2.5 Controller Chip	3	3.6.6 Commissioning/Production	5		
2.5.1 Concept	3	3.7 Slow Control	5		
2.5.2 Design	3	3.7.1 Concept/Design	5		
2.5.3 Prototype	3	3.7.2 Lab Setup	5		
2.5.4 Production	3	3.7.3 Commissioning of Components/SC-Nodes	5		
2.6 Module Bus	3	3.8 Mounting	5		
2.7 Mounting	4	3.8.1 Stave Assembly	5		
3 Strip part	4	3.8.2 Disk Assembly	5		
3.1 Module concept	5	3.8.3 Barrel Mounting	5		
3.2 Wedge Sensor	5	3.8.4 Disk Mounting	5		
3.2.1 Concept	5	4 Off-Detector Electronics	5		
3.2.2 Design	5	4.1 Cables / Power	6		
3.2.3 Prototype	5	4.1.1 Powering Concept	6		
3.2.4 Production	5	4.2 Mechanical Structures	6		
3.3 Barrel Sensors	5	4.2.1 Global Support	6		
3.3.1 Concept	5	4.2.2 Local Pixel Barrel Support / Cooling	6		
3.3.2 Design	5				



