

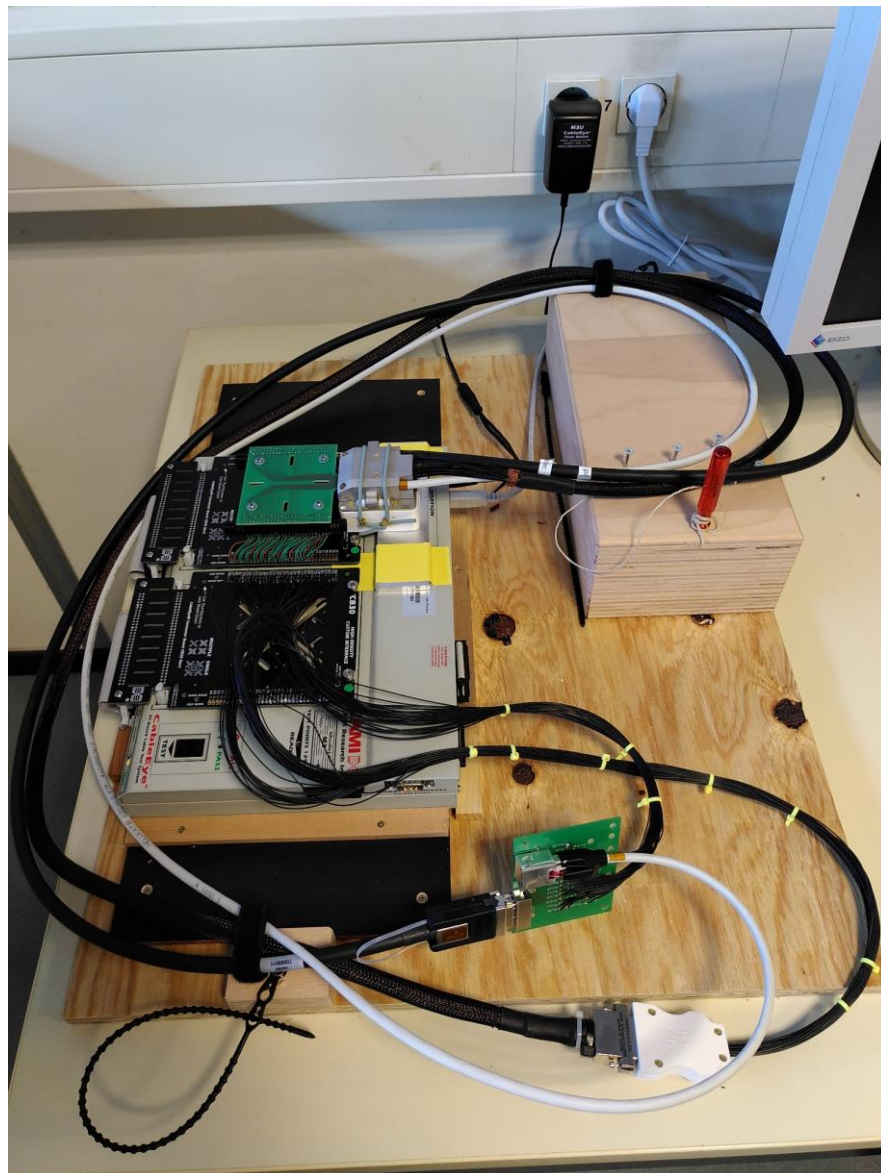
# Status at MPP

Markus Reif

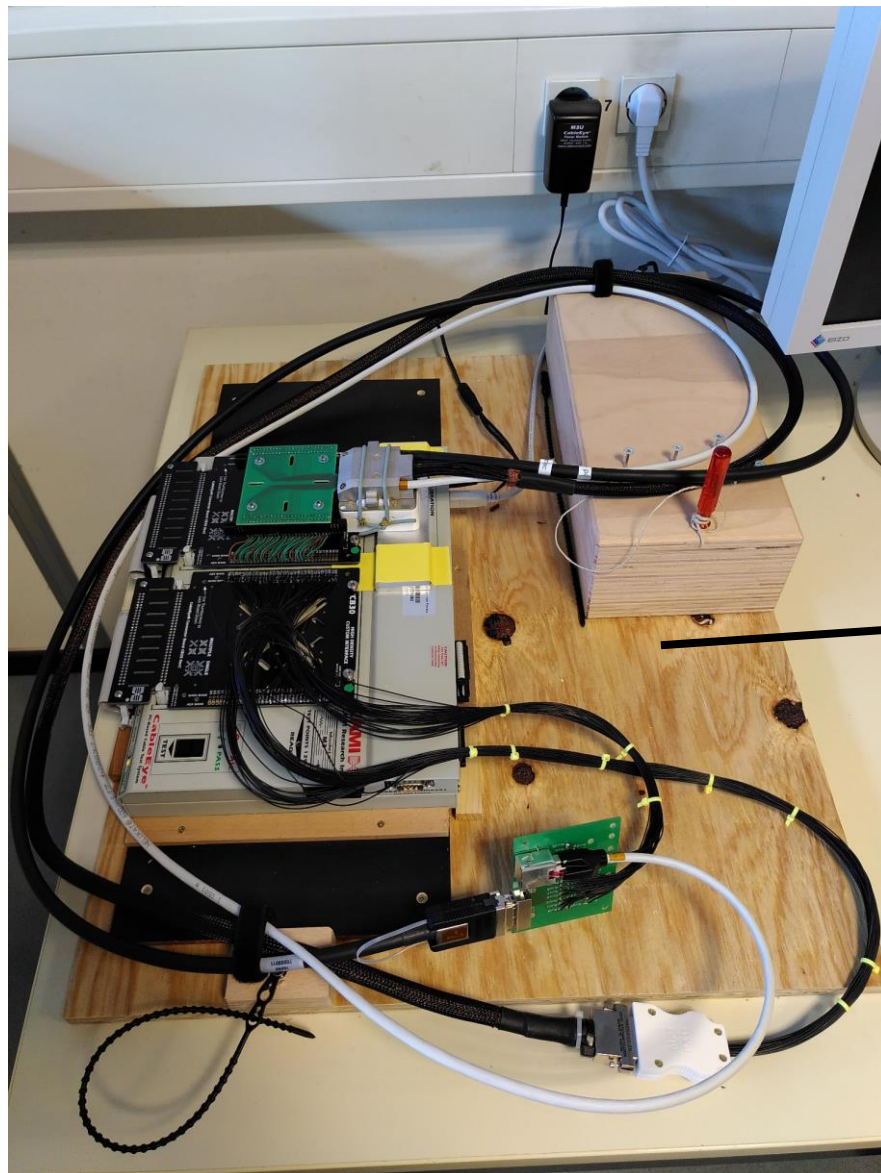
Belle II PXD Workshop

21 January, 2020

# Cable Tester

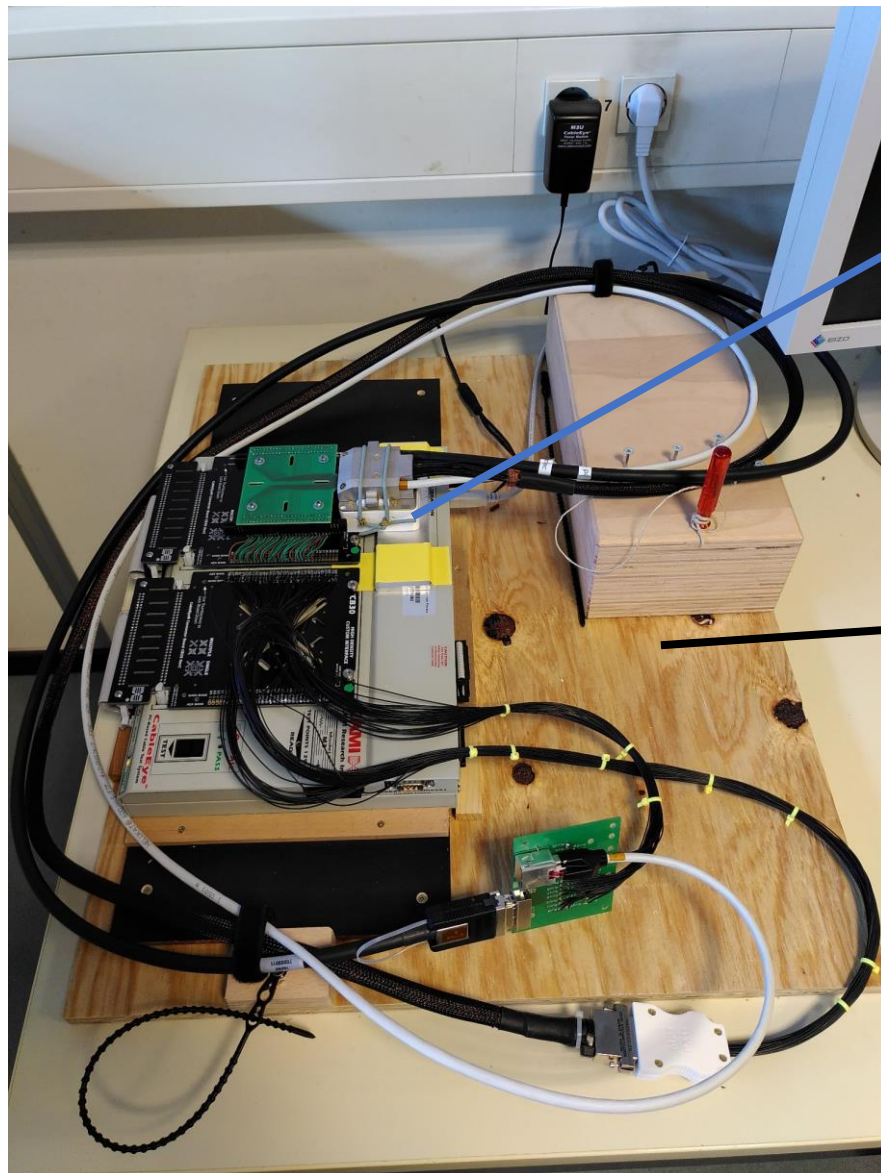


# Cable Tester



wooden structure for fixation

# Cable Tester

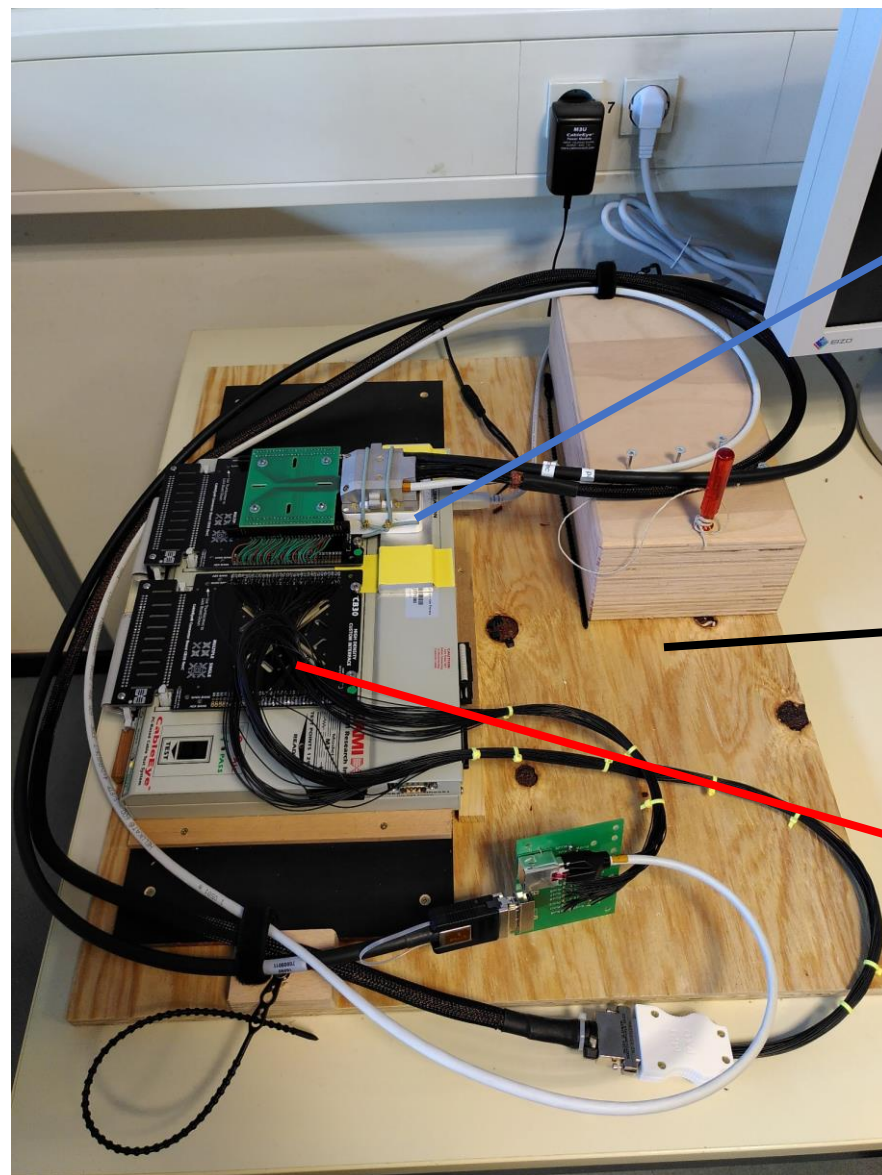


3D printed structure for easier plugging

wooden structure for fixation



# Cable Tester



3D printed structure for easier plugging

wooden structure for fixation

new adapter PCB currently designed

# Test Stands

- pxdtest12:**
- DHE-only setup
  - used for module characterization

- pxdtest8:**
- DHE-only setup
  - DHE has problems with highspeed links

- was used for Philipps emergency-shutdown-mass-test

- pxdtest9:**
- ladder-setup
  - highspeed link problems
  - ssd broke and was exchanged
  - will be upgraded to DHH-setup



# Module Situation

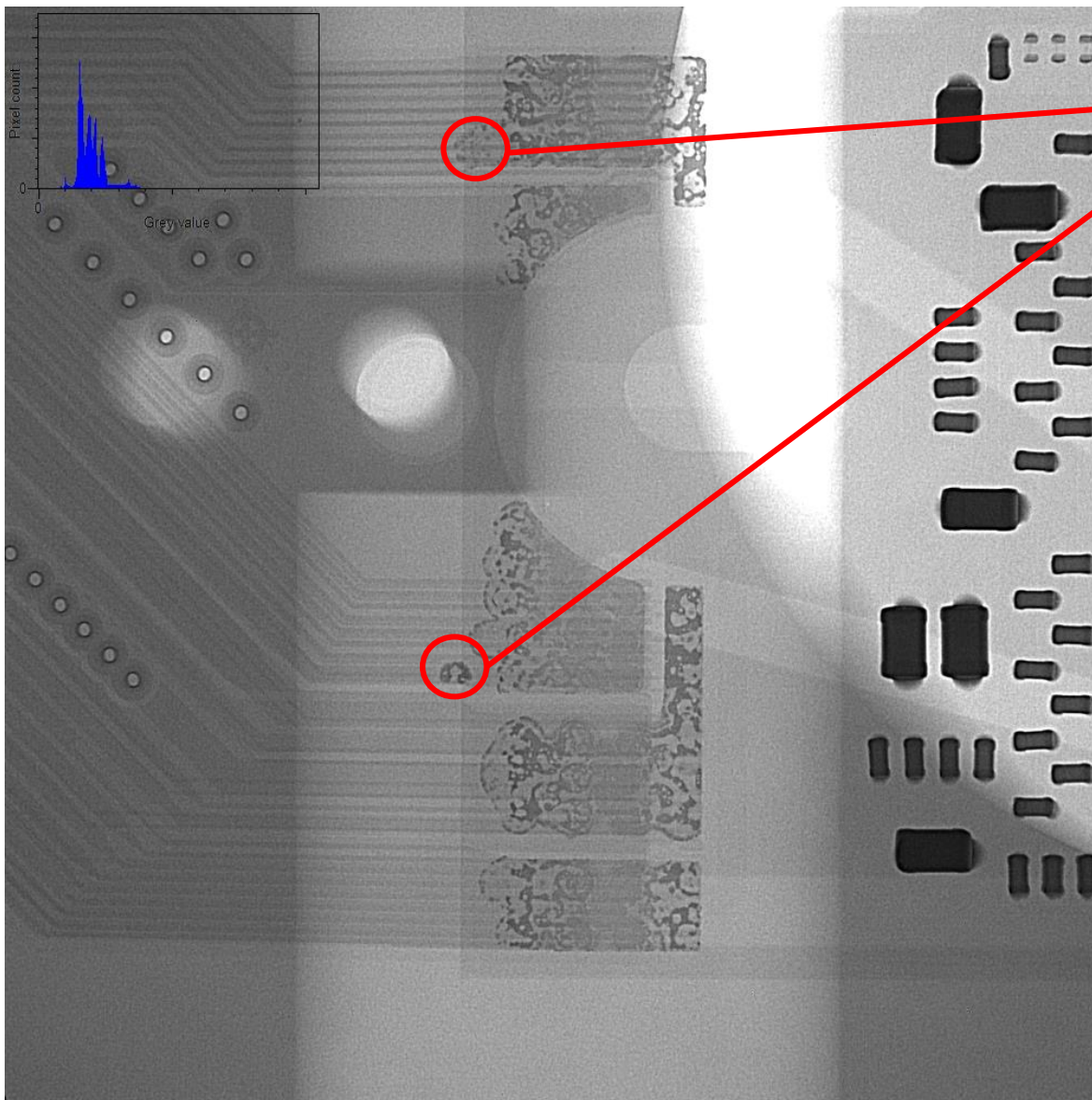
	Status	Quality
W04_OB1	tested (analog)	Class A
W05_IB	tested (analog)	Class A
W05_OF1	tested (digital)	Class A
W06_IB	probecard-tested (analog)	not classified
W06_IF	probecard-tested (analog)	not classified
W09_OF2	tested (digital)	Class C
W10_IF	tested (digital)	Class A
W10_OB1	tested (digital)	Class A
W11_IB	probecard-tested (analog)	not classified
W11_IF	probecard-tested (analog)	not classified
W11_OF1	tested (analog)	Class A
W12_OB1	tested (digital)	Class C
W37_OB1 (BEAST)	Kapton attached	not classified
W44_OB2	tested (analog)	Class A
W45_OF2	tested (analog)	Class A
W46_IB (BEAST)	Kapton attached	not classified

Summary	
Class A (>99%)	8
Class B (>98%)	-
Class C (<98%)	2
To be tested	6
Sum	16

possible ladders		
	L1	L2
Class A	1	3
Class C		1
Sum	1 (+2)	4



# Kapton Attachment



suspicious 'outrunners' on module W10\_IF

- probably due to new charge of soldering tin (lower viscosity)
- no effects during module testing
- one dummy module (looks good)
- continue kapton attachment



# Ladder Situation

Layer 1		Layer 2	
	Quality		Quality
L1_21	Class A	L2_42	Class B
L1_30	Class A	L2_43	destroyed
		L2_44	Class A
		L2_45	Class A
		L2_46	Class A
		L2_47	Class A
		L2_48	Class A
		L2_49	Class A
		L2_50	Class A
		L2_51	Class A
		L2_52	Class A

Summary		
	Layer 1	Layer 2
Class A	2	9
Class B		1

➤ enough ladders to complete PXD

# Summary & Outlook

## Summary:

- have 8 Class A, 2 Class C and 6 untested modules
  - 1 (+2) L1 Ladders and 4 L2 ladders
- have 2 L1 ladders and 10 L2 ladders
- totally: 3 (+2) L1 ladders and 14 L2 ladders

## Outlook:

- get cable tester running
- test remaining modules
- start ladder gluing when we have reasonable amount of modules

# Thank

# you!