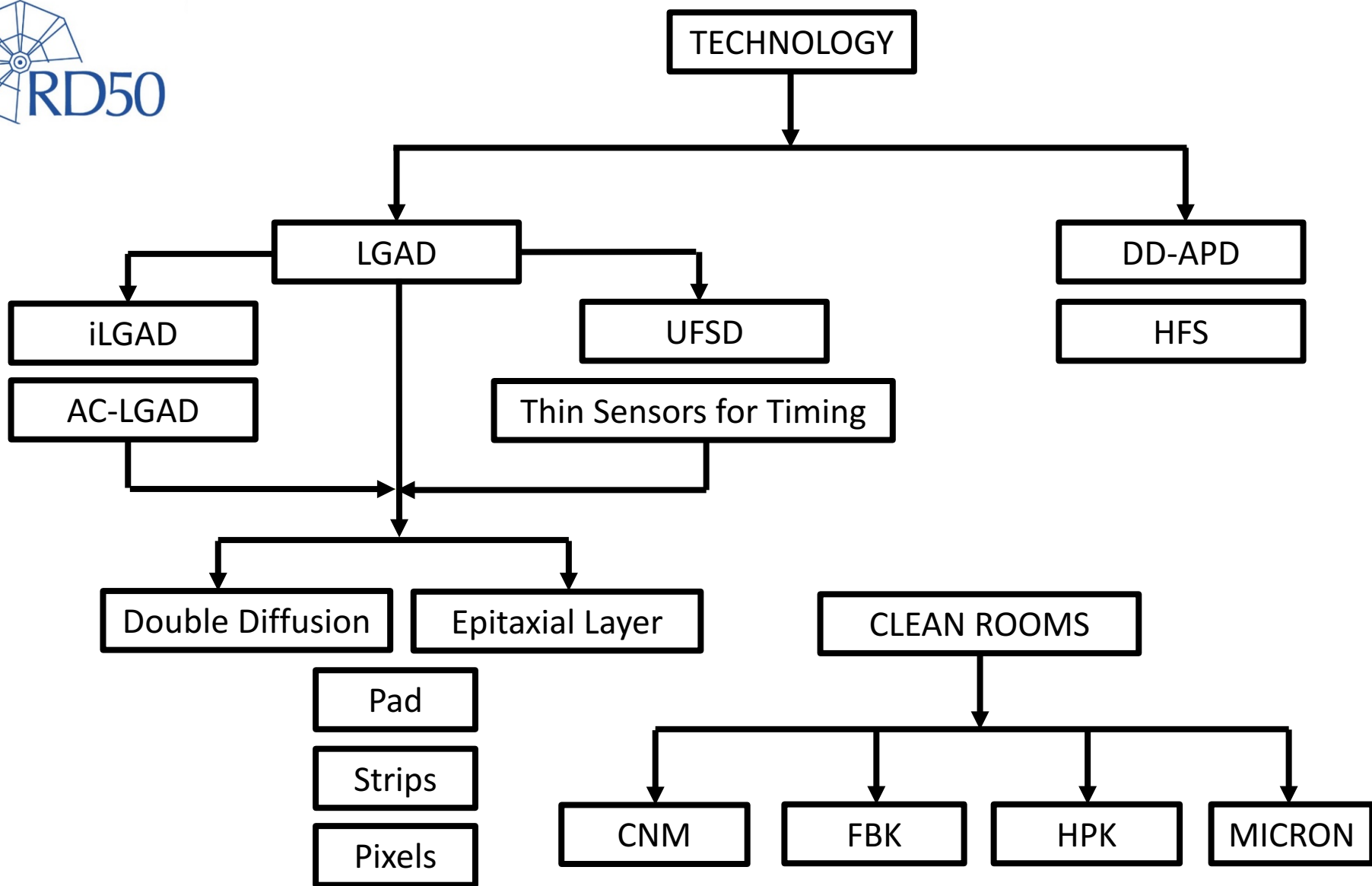


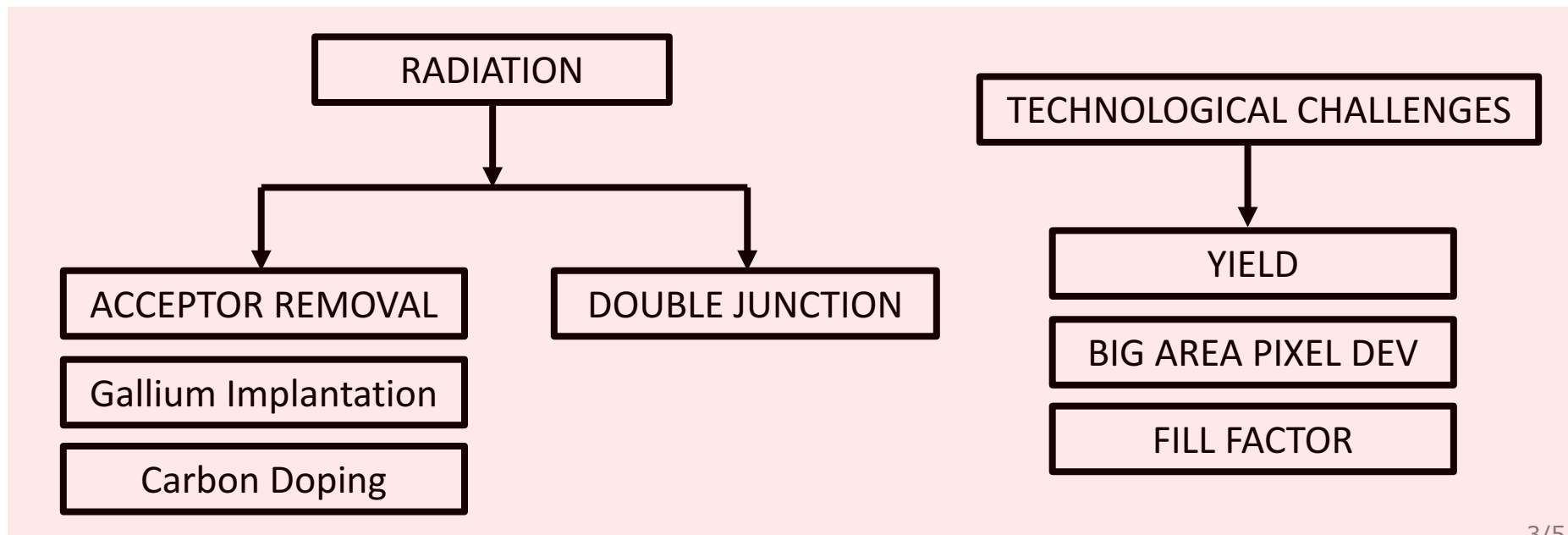
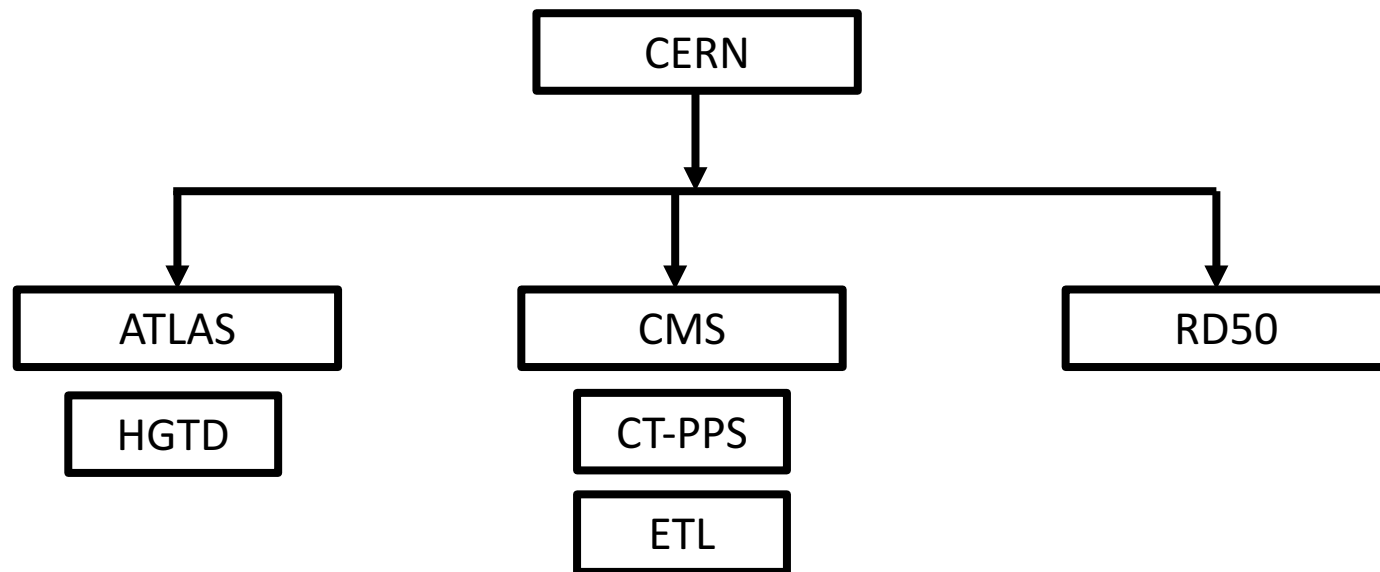


Precision Timing Detectors

APD, LGAD, DD-APD, UFSD, HFS

Work done in the framework of the CERN RD50 Collaboration

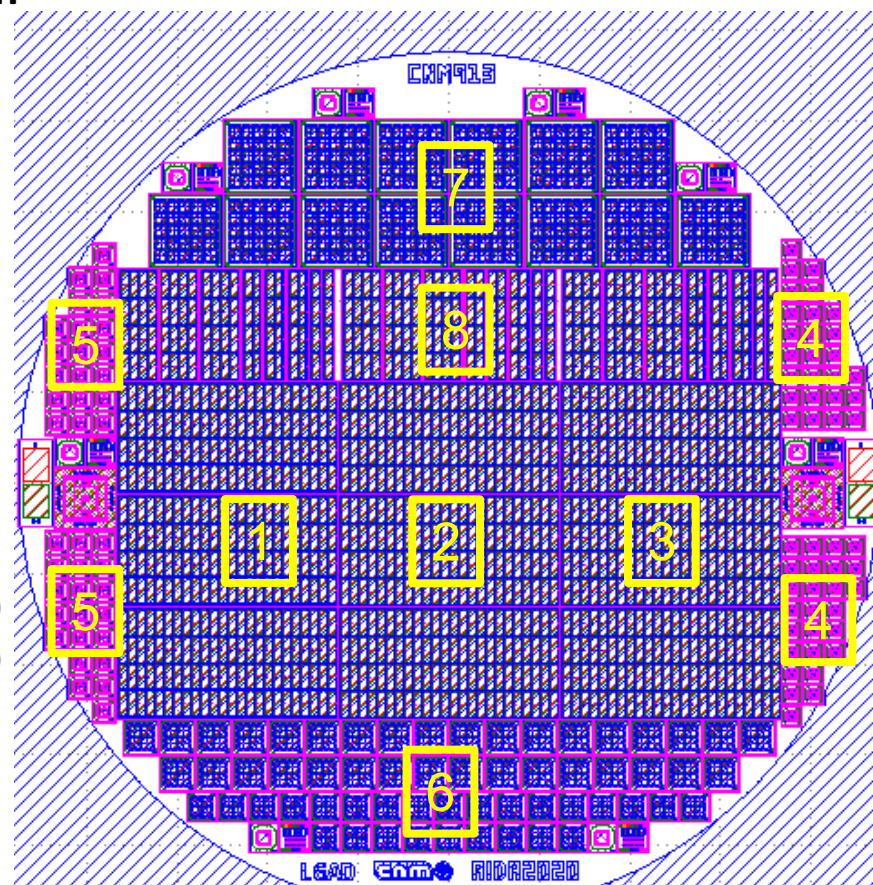




4" Thin LGAD 4 AIDA2020 (35-50 μm thick Si-Si)

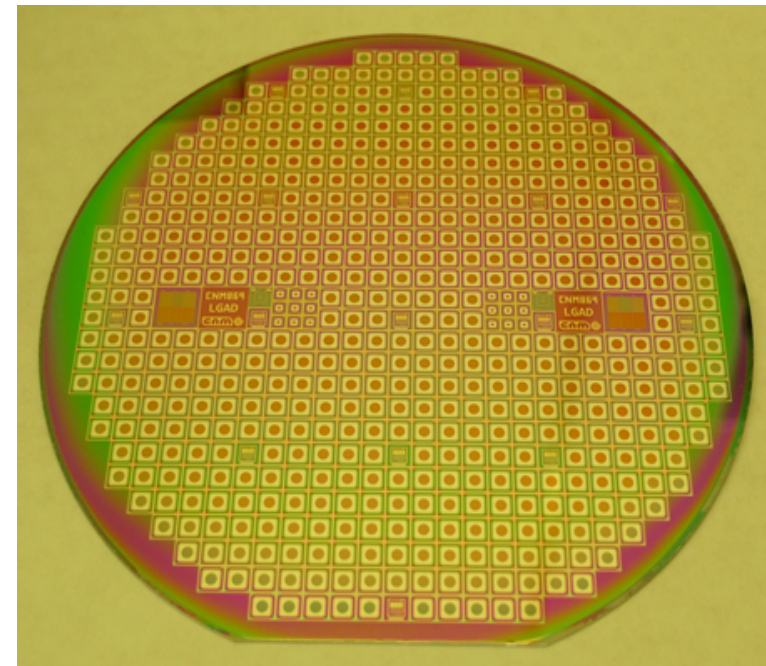
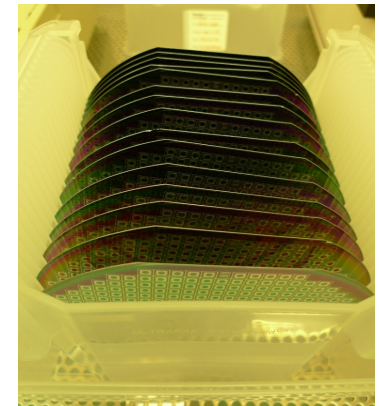
○ Run AIDA2020. Chips Distribution. Last Version

- ✓ 9x CMS_CT_PPS_3x1_4x24_JTE
 - JTE = 5 μm (1)
 - JTE = 10 μm (2)
 - JTE = 15 μm (3)
 - **3x**: 4x4, 4x2, 4x1 (8)
- ✓ 52x LGAD_S_1x1_2337_OVL3 (4)
 - Area 1.0 x 1.0 mm²
- ✓ 40x LGAD_S_1_3x1_3_2637_OVL3 (5)
 - Area 1.3 x 1.3 mm²
- ✓ 60x HGTD_S_2x2_3400_OVL3_BUMPADS (6)
 - **34** ATLAS HGTD **Array 2x2** (1.3 x 1.3 mm²)
 - **26** ATLAS HGTD **Array 2x2** (1.0 x 1.0 mm²)
- ✓ 14x HGTD_S_5x5_6589_OVL3_BUMPADS (7)
 - ATLAS HGTD **Array 5x5** (1.3 x 1.3 mm²)
- ✓ 2x PARIS_QUAD_CNM913
- ✓ 6x CNM913_TEST_6674



First 6" LGAD (300 μm thick, Run 9974)

- **Run 9974:**
 - ✓ Wafer thickness = **300 μm**
 - ✓ Small diodes **5x5 mm²**
 - ✓ **JTE** and Test structures
 - ✓ PIN + LGAD
 - ✓ Design optimized for **Automatic probe station** measurements
 - ✓ **Electrical characterization on-going**



- ✓ **472** LGAD 5x5 mm²
- ✓ **64** PIN 5x5 mm²
- ✓ **16** LGAD 1x1 mm²
- ✓ **2** PIN 1x1 mm²
- ✓ **561** Devices

Thank you for your attention !!!!

