

**Physikalisches Institut
der Universität Heidelberg
Philosophenweg 12
69120 Heidelberg**



TRD raw reader user perspective

Sylwester Radomski

Two sides of TRD

Physical structure

- reflects pad plane geometry
- chambers, padrows, columns
- shared pad are treated in an ugly way

Data organization structure

- reflects electronics side
- sectors (payloads), half chambers, ROBs, MCMs, ADCs
- natural treatment of shared pads
- natural data consistency control

Pros, cons and compromise

Data organization structure

- + could be as fast as it gets (SAX architecture)
- for historical reason not programmed properly (mixing of SAX and DOM arch.)
- for historical reasons complex code
- not quite compatible with DigtsManager

Physical organization structure

- + compatible with DigitManager
- hides underlying data structure, important in case of problems

Compromise

looping: sector, chamber, padrow, column