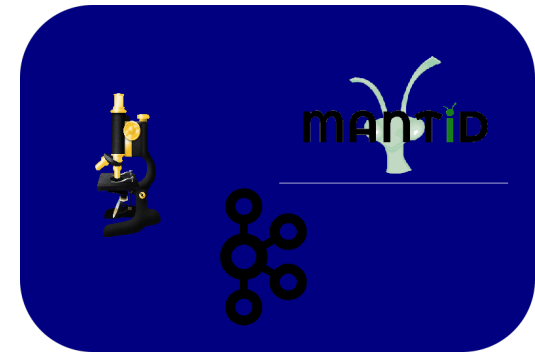
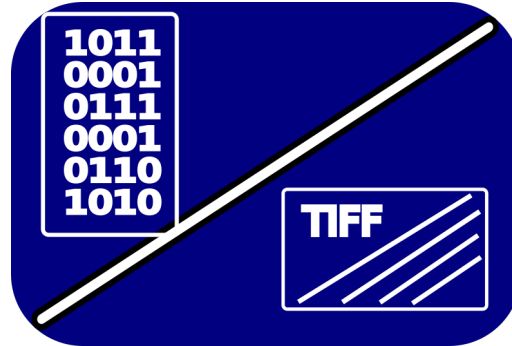
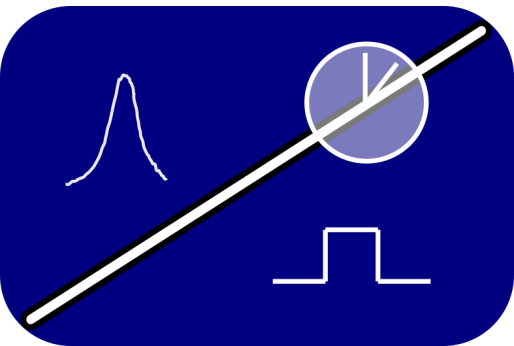
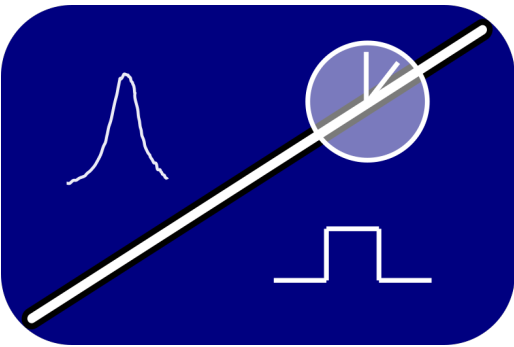


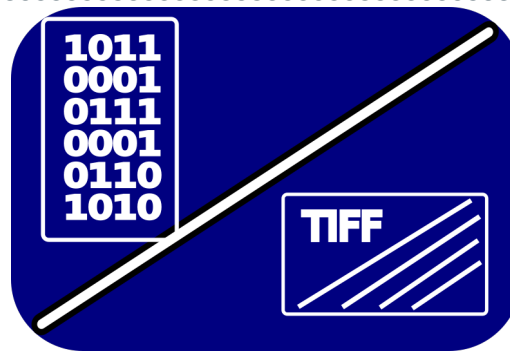
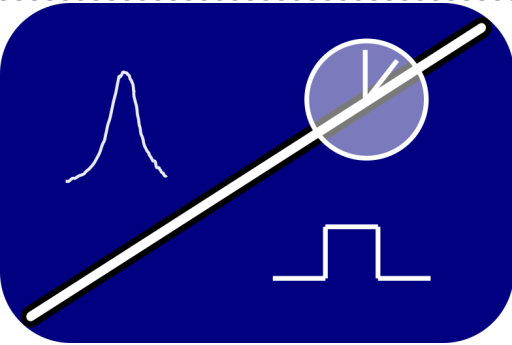
FROM SIGNAL ACQUISITION TO RAW DATA



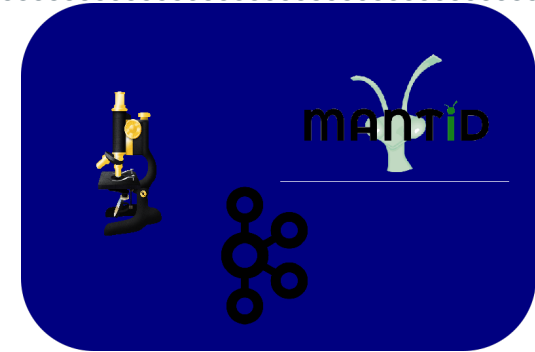
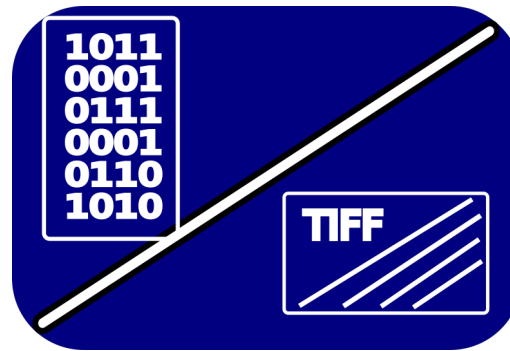
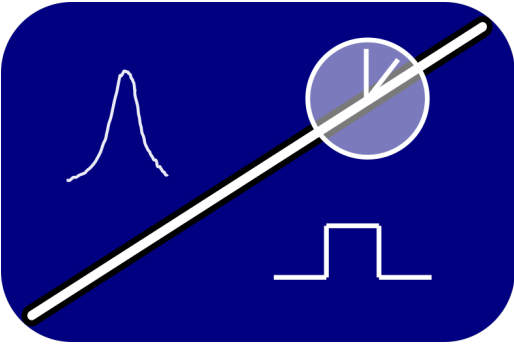
Christian Jacobsen / HZG
14.06.2018 Copenhagen



- Time to digital converter
 - Absolute timestamps
 - Zynq-FPGA based **S**ystem **o**n **C**hip (SoC)
 - Timestamp sorting
 - Listmode output
 - Quickview (Web-based)
 - Actual development



- V20 Testbeamline @ HZB
 - Dataconverter for DeliDAQ system
 - DeliDAQ Listmode files → TIFF images or Root files (CERN format)
 - Tiff images as time series over flight time
 - Imagej processes stack of Tiff images



- Future

- TDC based on SoC with embedded Linux
- Linux directly communicates with ESS infrastructure
- TDC → Kafka → Mantid
 ↳ NeXus
- Controllable with Epics/Web