Industry meets Academia: Beam Monitoring Instrumentation and Quality Assurance



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CDT: 10Boron based neutron detectors as technological alternative to 3He based neutron detectors that suffer the severe crisis in supply of 3He

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CDT is a university spin-off founded in 2006 dedicated to detector technology, especially neutron detectors. Therefore it develops and provides complete solutions for customized needs starting from particle detector front-end systems over highly integrated readout electronics and software. For neutron detection thin coatings of 10Boron are used as technological alternative to 3He based neutron detectors that suffer the severe crisis in supply of 3He. Highly integrated ASIC-technology is used to realize hundreds of individual detection channels at non-proportional cost. All detectors use an ASIC electronic front-end paired with an adaptable integrated FPGA data processing unit to provide high rate capacity.

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