

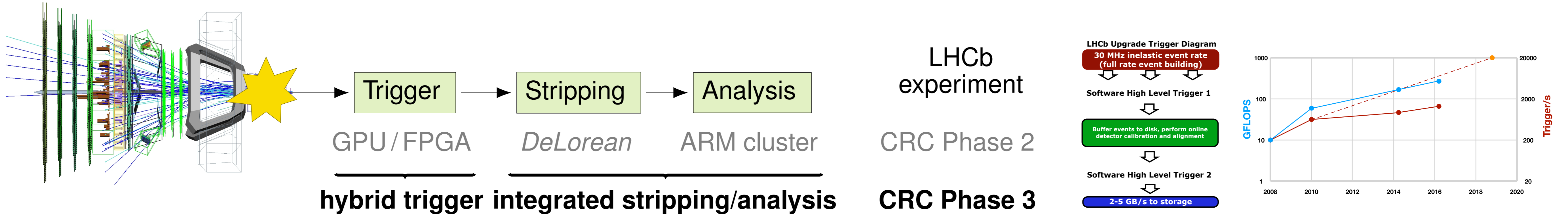


Project C5 Real-Time Analysis and Storage of High-Volume Data in Particle Physics

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Challenges & Goals



- Goals of Track 2**
- ▶ Development of an intelligent, hybrid Trigger
 - ▶ Evaluate the possibility to derive trigger decisions based on raw data
 - ▶ Exploit heterogeneity to boost algorithm performance

- Additional Challenges**
- ▶ Trigger performance does not scale according to Moore's Law
 - ▶ Strict and high bandwidth requirement

- Goals of Track 1**
- ▶ Integrated pipeline for DeLorean & Analysis
 - ▶ Resource-aware and user-friendly control of the system
 - ▶ Exploit heterogeneity in a large scale

Common Goals

- ▶ Generalization of concepts of Phase 2
- ▶ Fullfill production performance constraints
- ▶ Ensure correctness by reference analysis
- ▶ Solution that can be used in practice

Planned Research

