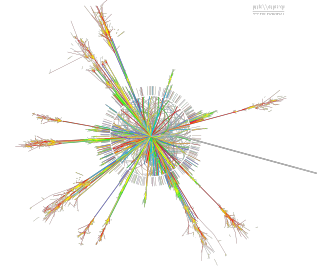
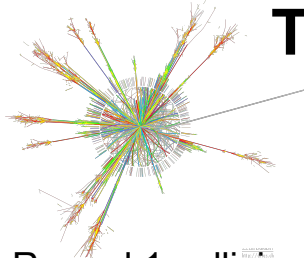


# Development, Validation and Integration of the ATLAS Trigger System Software in Run 2

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on behalf of the ATLAS Collaboration

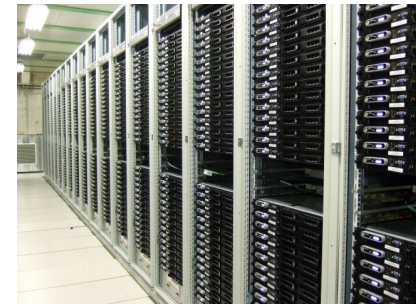


**Goal:** Record 1 collision of interest out of every 40,000 delivered by the LHC every millisecond

**Apparatus:** The trigger system of the ATLAS detector at the LHC is a combination of hardware, firmware and software, associated to various sub-detectors that must work in seamless cooperation

## Challenges:

- Enormous data volume
- Large-scale software project
- Diversity of the ATLAS physics program
- Coordination between many groups and sub groups
- Coordination with the LHC schedule
- Planned and unplanned sub-system performance changes



**This poster focuses on the workflow and organization of the ongoing trigger software development, validation and deployment.**

Features of this process include:

- Grid computing
- Software development project management
- Data reconstruction

