

# Computing Challenges for CBM

- Huge interaction and data rates necessitate real-time event reconstruction and data selection
  - Reduce about 1 TB/s to several GB/s in real time in software
- Basis of the data model is a time slice containing many events
  - No events from hardware trigger; have to be found in software
- Fast 4-D reconstruction algorithms under developments
  - Many achievements, but still some way to go
- Quest for a common online and offline software framework
  - Concurrency needed
  - Common data model allowing time-based and event-based analysis without change of code
  - Make use of the extension of the current FairRoot to FairMQ