# CBM First-level Event Selector FLES

FLES: Central physics selection system for CBM

- HPC processor farm with FPGAs, GPUs and fast interconnect
- \>1 TByte/s input data stream
- High-throughput event building
- Online analysis using fast, vectorized many-core track reconstruction algorithms

Status
- Demonstrator implementation available
- Data chain field-tested in beam tests

CBM
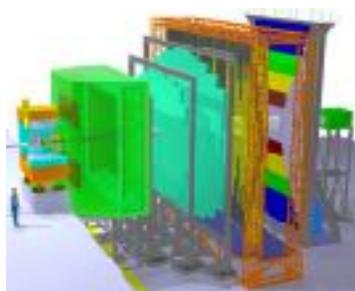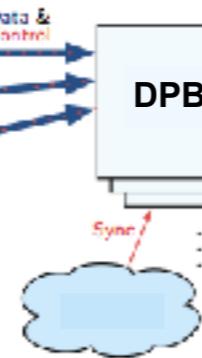
- **10^7 events/s**
- Self-triggering front-end
- Data push readout
- Complex global triggers

- **High-throughput event building** (InfiniBand)
- **>1 TByte/s** input data rate
- ~ 1000 input nodes
- ~ 60.000 cores
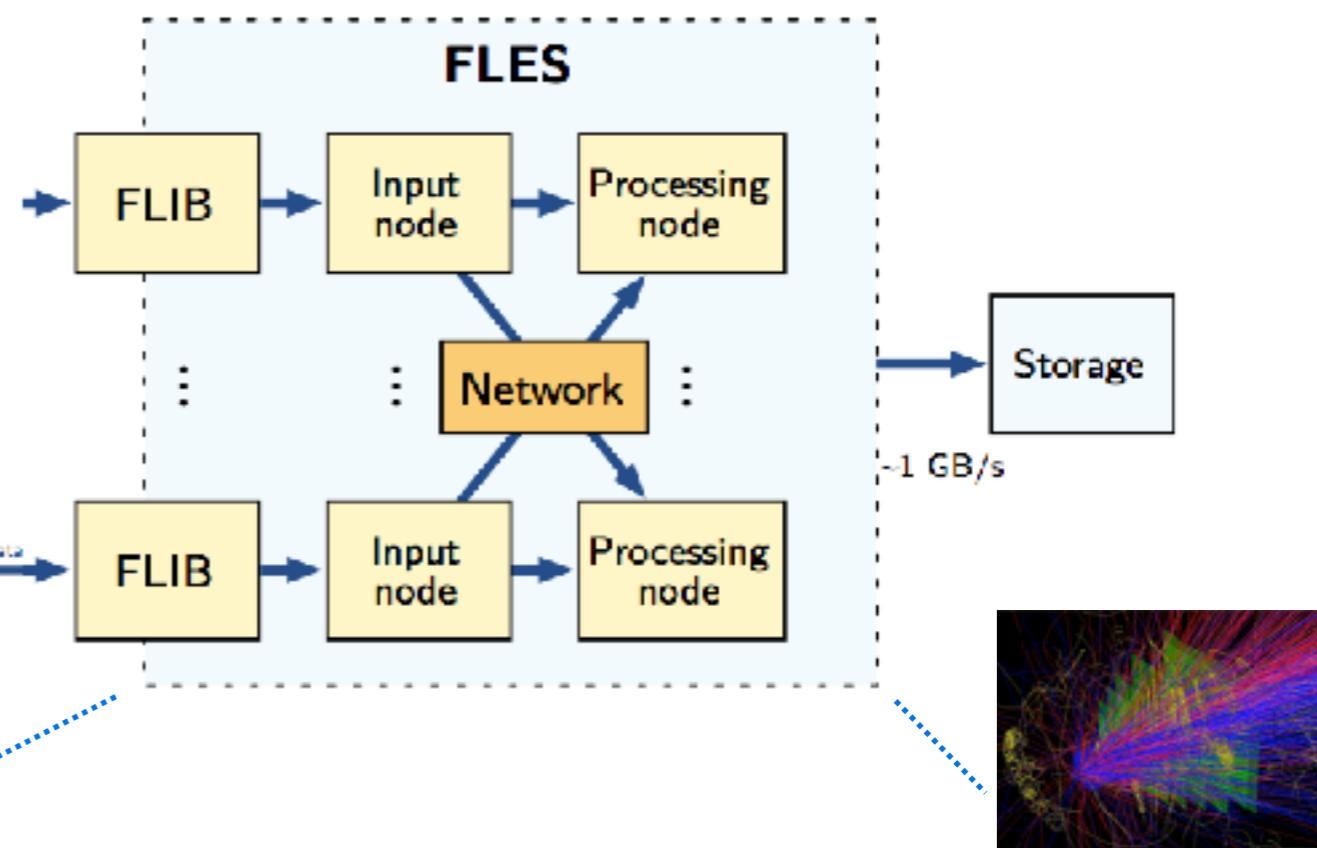
- **Online event selection**
- 4-D tracking
- Identification of leptons and hadrons
- High-precision vertex reconstruction