



ALICE

Real-time conditions data distribution for the Online processing of the ALICE experiment

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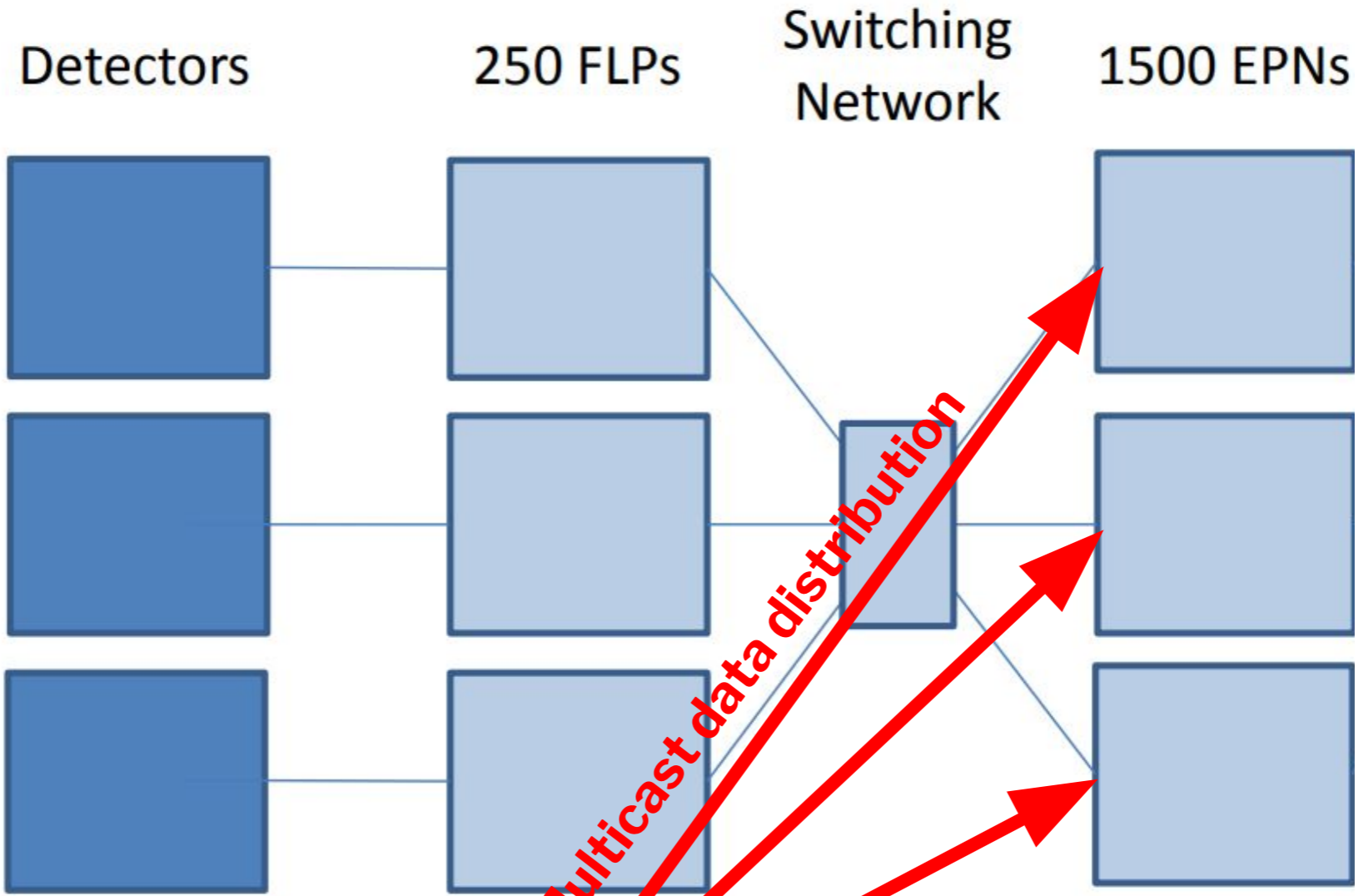
Mentor:

Costin Grigoraş



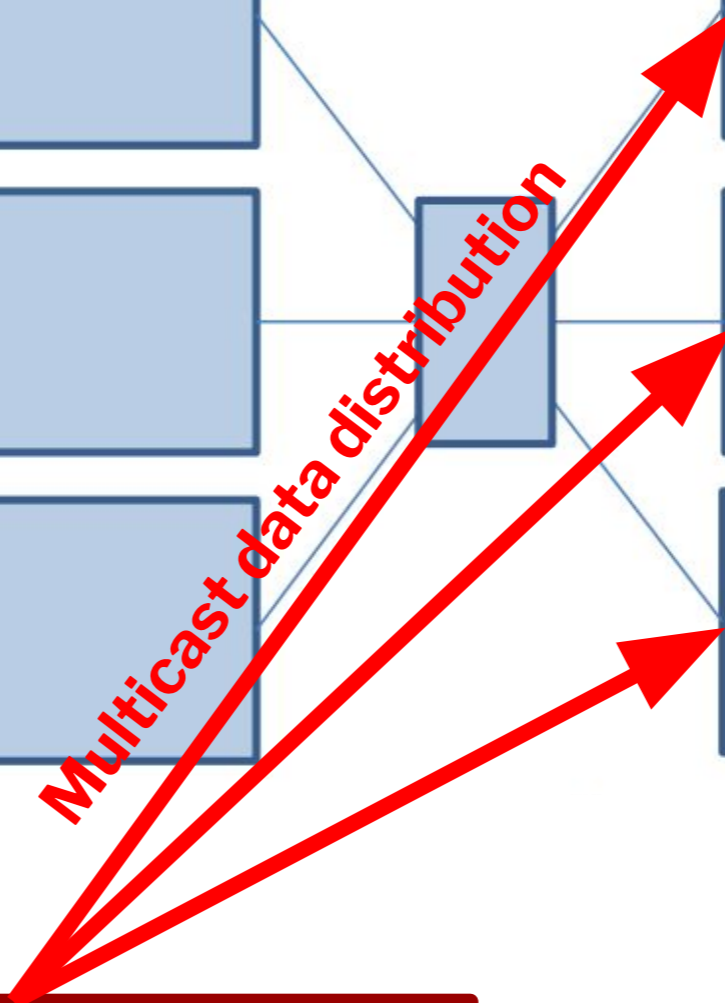
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Experiment online data acquisition and prompt reconstruction cluster



Sensors

Central calibration and condition data repository



Objectives

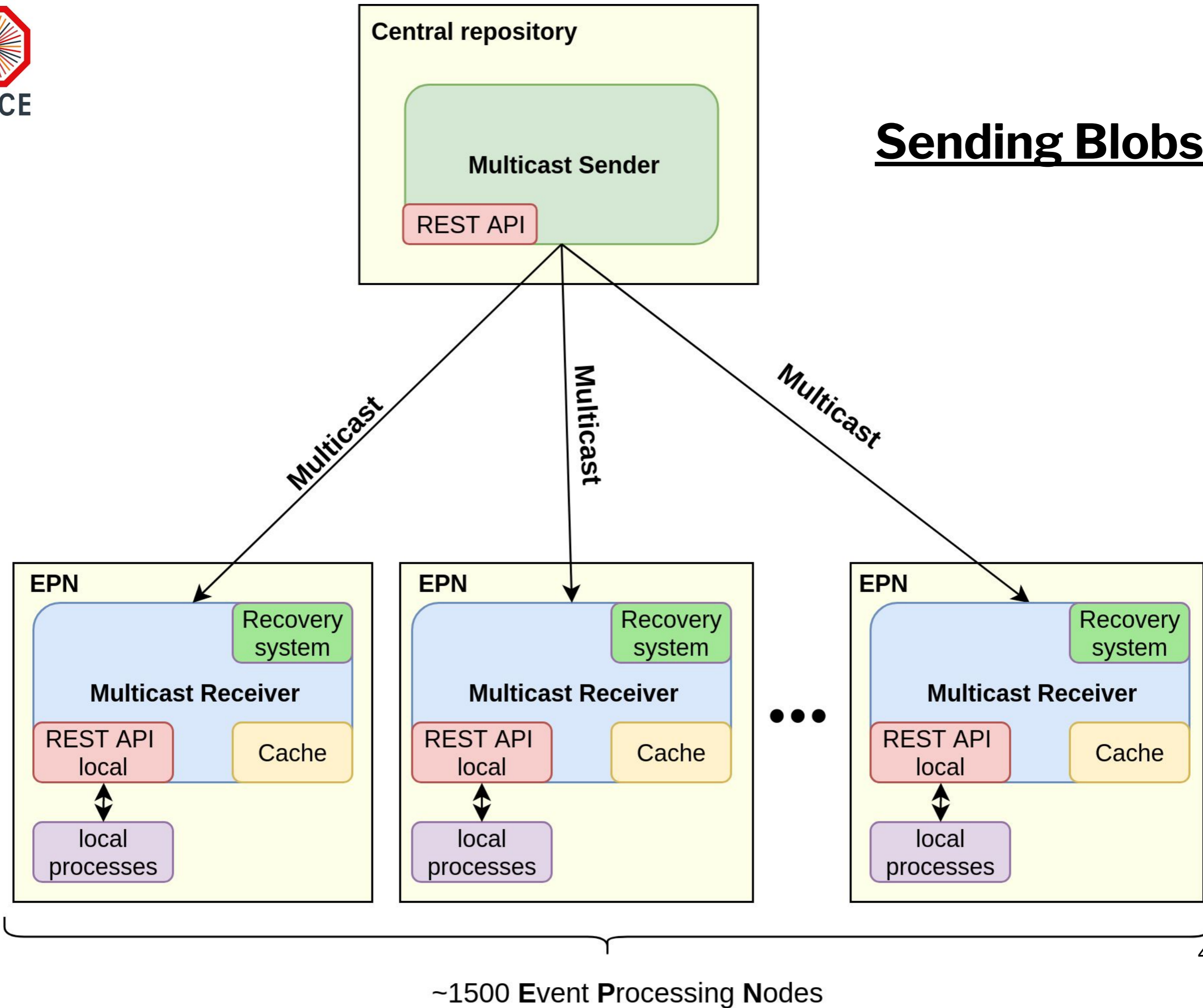
Solve:

- Bandwidth problem: **MULTICAST**
- Reliability problem **Retransmissions - NACKs**
- Maximum payload size **Fragmentation and reassembling**
- Compatibility with current implementation of CCDB **reuse the REST API**



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Sending Blobs



Conclusions

- hybrid data delivery mechanism: multicast + REST API
- an adaptable fragmentation mechanism to send $> 64\text{KB}$

Sent 50 data objects of 2 MB per second with less than 2% **fragment** loss and recover all the missed fragments in the time frame given with a small number of receivers