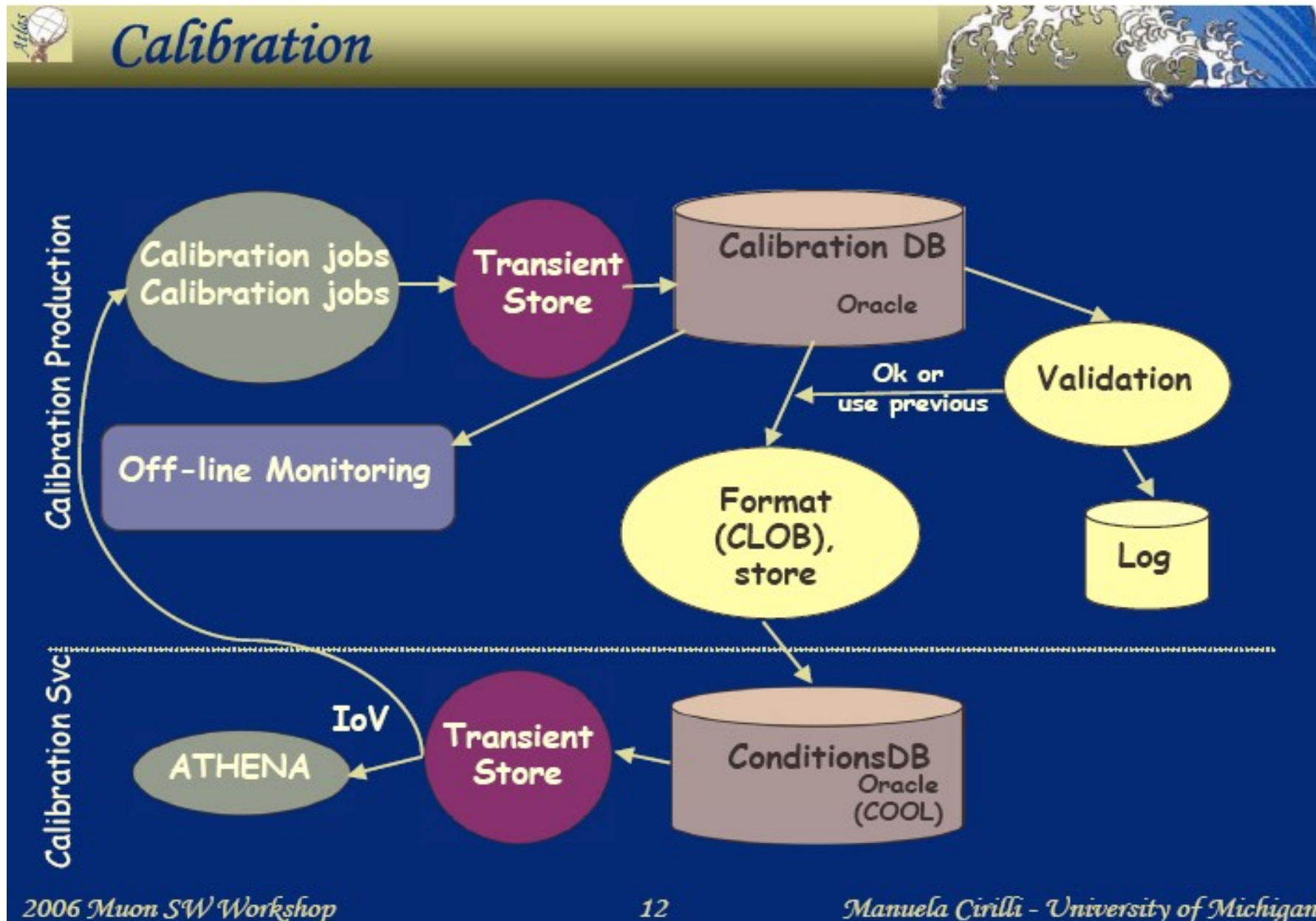


ATLAS Muon Calibration DB

- Calibration plan: Three remote sites (Michigan, Rome, Munich) will receive a special calibration data stream to do daily calibrations of the muon system (drift functions + alignment).
- Validated calibration constants will be uploaded to the ATLAS Conditions DB at CERN (daily).
- A special calibration DB will be used to store calibration history and intermediate details of calibration. We would like to consider the possibility of implementing this calibration DB as a replicated DB using Oracle Streams.

Local Calibration DB Scheme

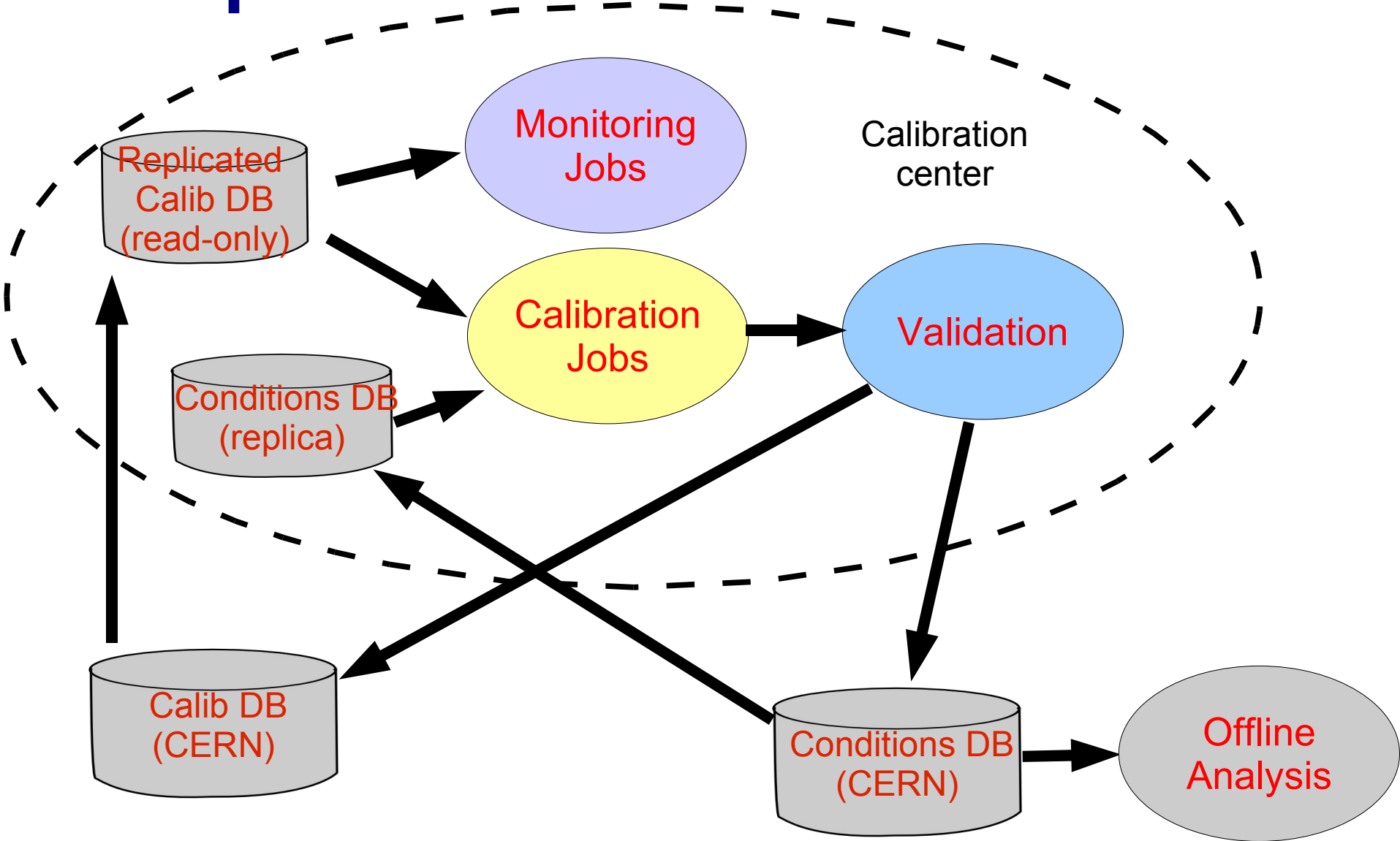


Thanks to Manuela Cirilli for slide

Replicated DB for ATLAS Muon Calibrations

- Concept: Main calibration DB located at CERN with replicas at 3 calibration centers.
- Advantages:
 - DB maintained/backed up by experts, with little expertise needed at calibration sites.
 - Common DB makes it easy transfer work between calibration sites if one goes offline.
 - All sites have access to full calibration history (for monitoring purposes).
 - Network latency for DB access is nil if replica is used – this is important for Michigan

Replicated Calibration DB Scheme



Questions

- What are the requirements for a replicated DB?
 - Software + licenses
 - Hardware
 - CERN support?
- Is it technically feasible/appropriate?
 - Is it a good solution for our problem?
 - How difficult to setup/maintain?
 - What kind of latencies are expected to update DB?
 - What is the time scale to implement replicated DBs?
 - What is the best way to upload calibration data to CERN DB? Direct DB access? Text files?