

CMS data quality GUI test: 30129 . 3 1361: Everything, 1 / 15

Services Data sources Workspaces

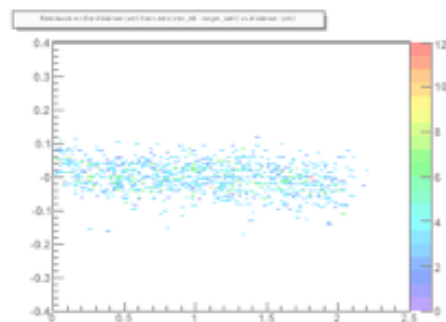
Page: [Previous](#), [Next](#), 1 of 15 [Remove selected workspace](#) [View all monitors](#) [View all alarms](#)

## Objects

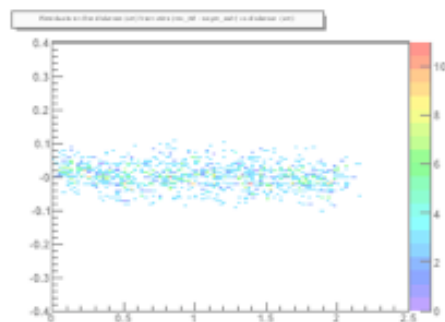
Search Show Item [List...](#)

- ☐ (Top)
- ☐ CSC
- ☐ EventInfo
- ☐ DT
- ☐ DTChamberEfficiencyTask
- ☐ DTDigiTask
- ☐ DTEfficiencyTask
- ☒ DTResolutionAnalysisTask
- ☐ DTSegmentAnalysisTask
- ☐ DataIntegrity
- ☐ EventInfo
- ☐ Test
- ☐ Tests
- ☐ Hcal
- ☐ DataFormatMonitor
- ☐ DeadCellMonitor
- ☐ DigiMonitor
- ☐ EVT MASK
- ☐ EventInfo
- ☐ FEDs Unpacked
- ☐ HotCellMonitor
- ☐ LEDMonitor
- ☐ PedestalMonitor
- ☐ Process Latency
- ☐ Quality Status
- ☐ RUN TYPE
- ☐ RecHitMonitor
- ☐ STATUS
- ☐ TrigPrimMonitor
- ☐ L1T
- ☐ EventInfo
- ☐ L1TCSCF
- ☐ L1DTTE
- ☐ L1DTTPG
- ☐ L1TCMT

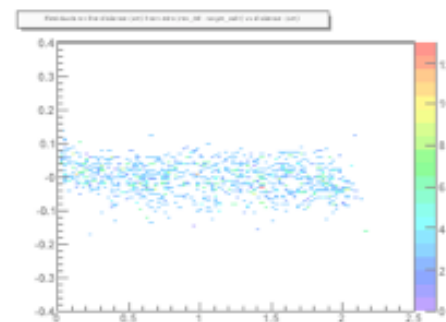
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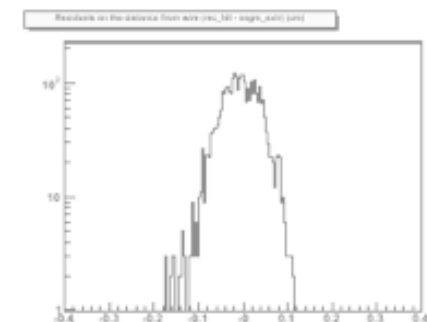
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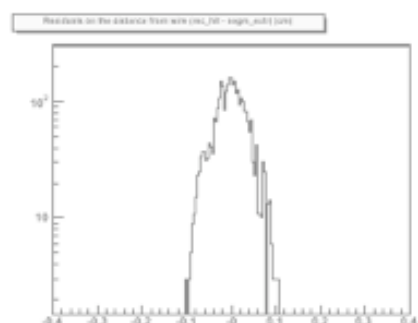
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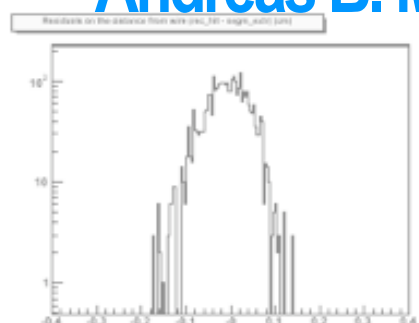
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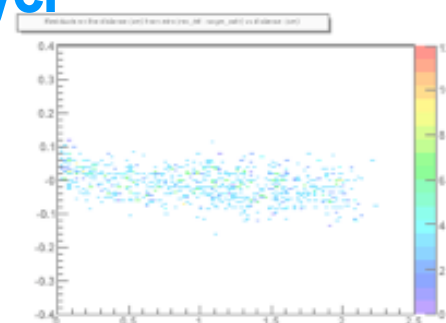
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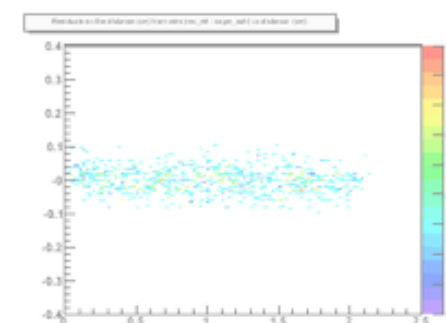
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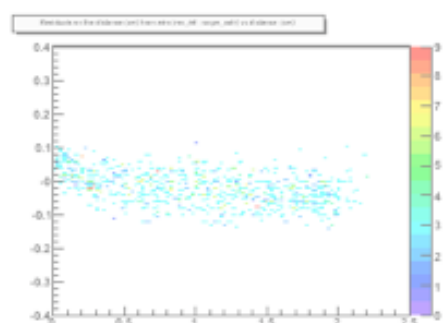
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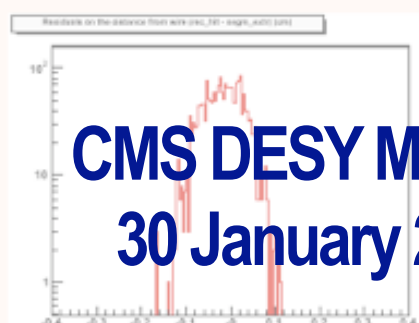
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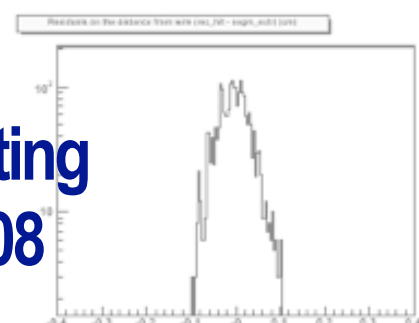
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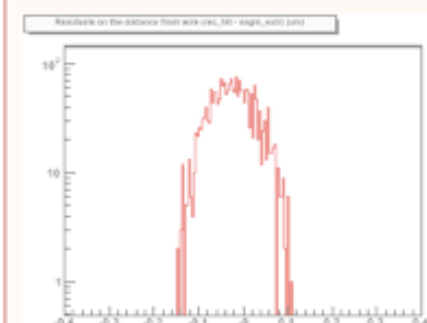
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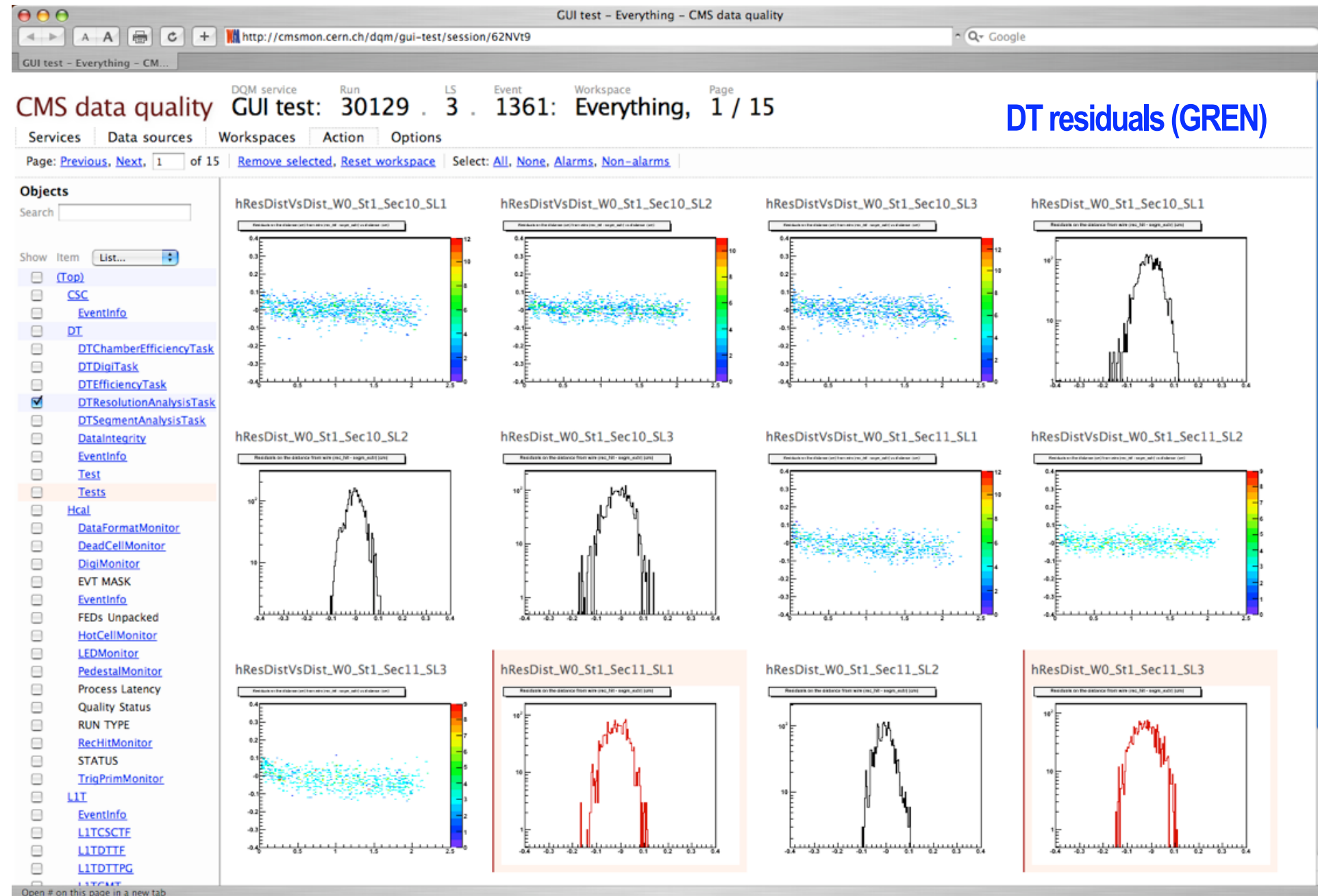
Andreas B. Meyer

CMS DESY Meeting  
30 January 2008



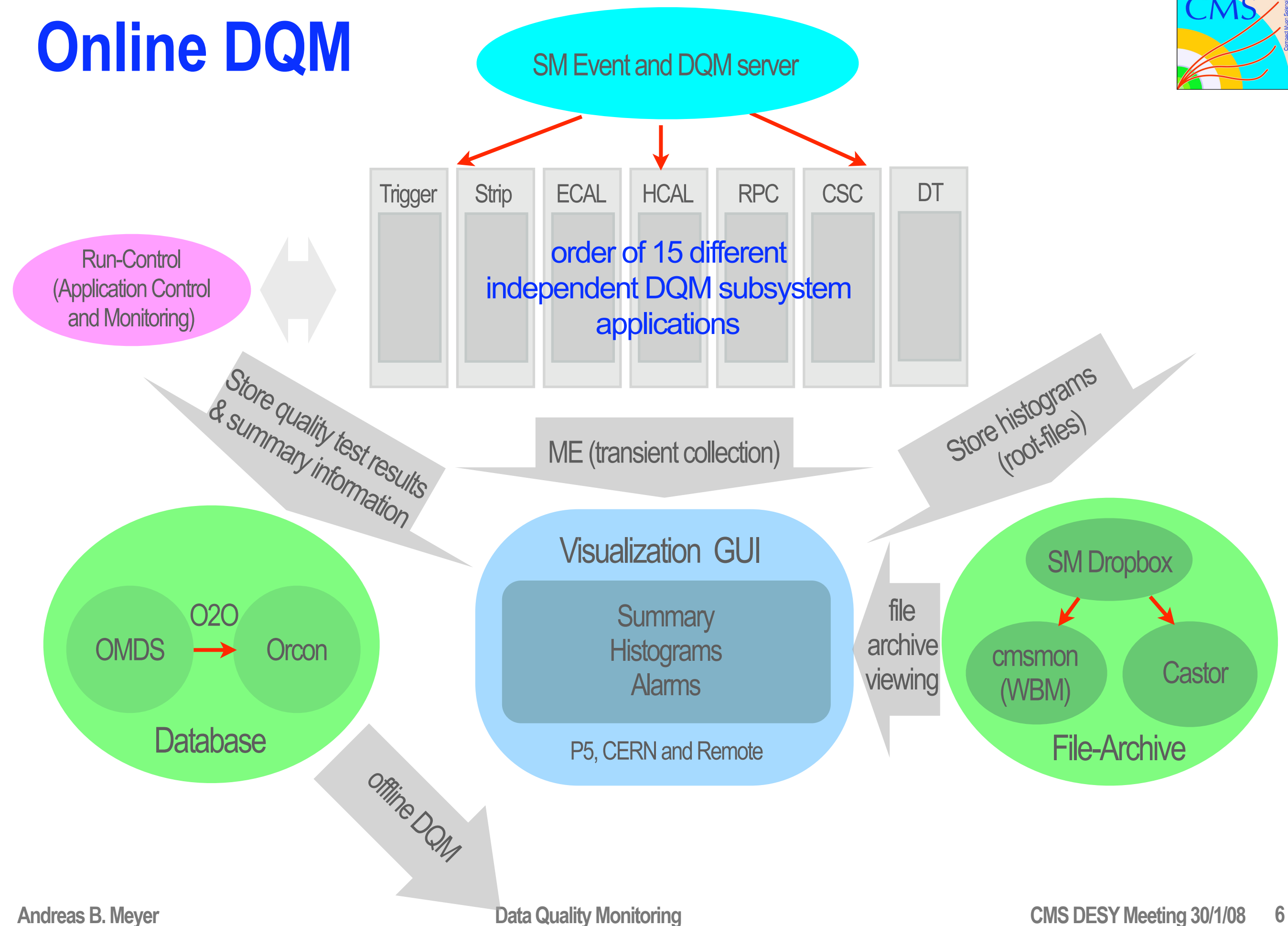
<http://cmsmon.cern.ch/dqm/online-playback> (playback)

- Web-based service
- no specific S/W installation on user side
- accessible from
  - P5, CERN
  - Remote
- access to histograms
  - Online (live)
  - Online (file-archive)
  - Offline Tier-0 (file-archive)
  - Offline CAF, Tier-X, ...



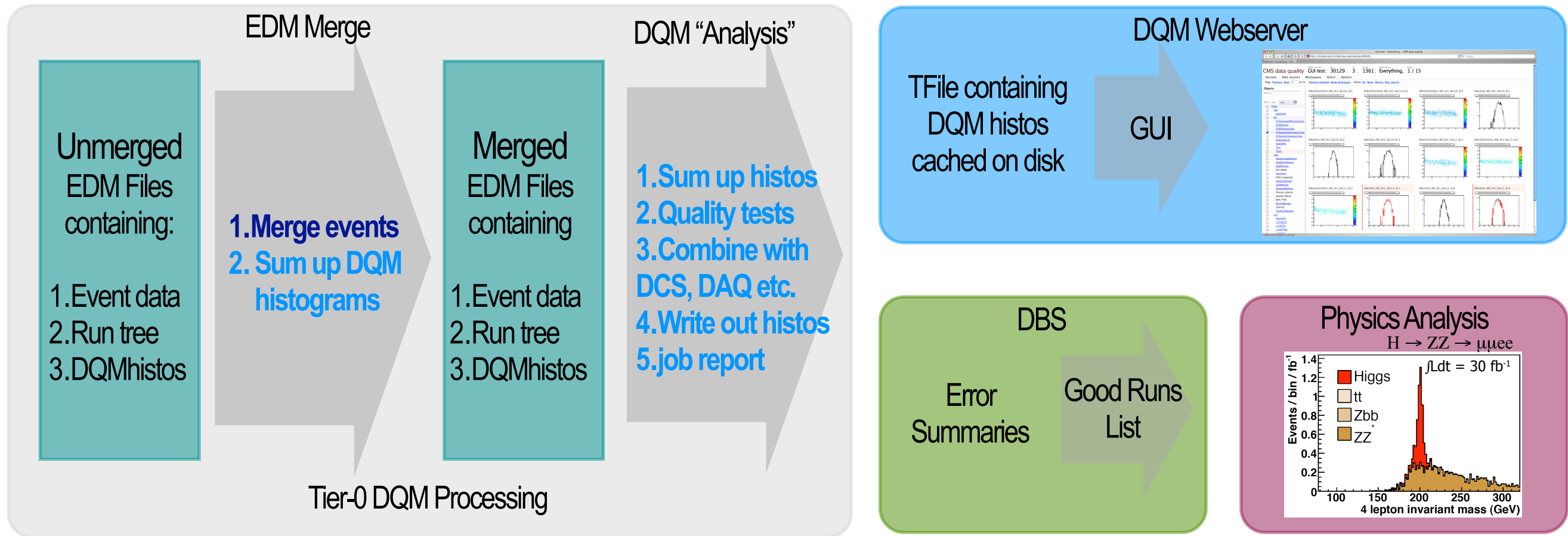
Simple and fast access to all DQM data – same tool for online and offline DQM

# Online DQM





# Offline DQM



- **Requirements:**
  - Portability between online (P5) and offline (Tier-0)
  - Same DQM framework software and output format for online and offline, same GUI backend
- **Workflow:**
  - Add histogram merging to standard EDM Event Merge Step
  - Add 2nd merge step for DQM "Analysis", histogram extraction, DBS registry
- **Output:** Visualization (GUI) and Good Run Lists for physics analysis

Offline DQM architecture and workflow largely defined, implementation starting now

# Other ongoing Work



- **Rewriting DQM Core Software (3 step migration planned for Jan/Feb)**
  - simplifying package structure (done)
  - upgrading transport layer (being worked on)
  - short-cutting “MonitorElements” with root (planned for mid February)
- **Integration with Runcontrol (underway)**
- **Quality tests improvement and deployment**
  - **Dmytro Volyanskyy (DESY-fellow) is starting on DQM with contributions in this area**

**The DQM project is on the critical path**

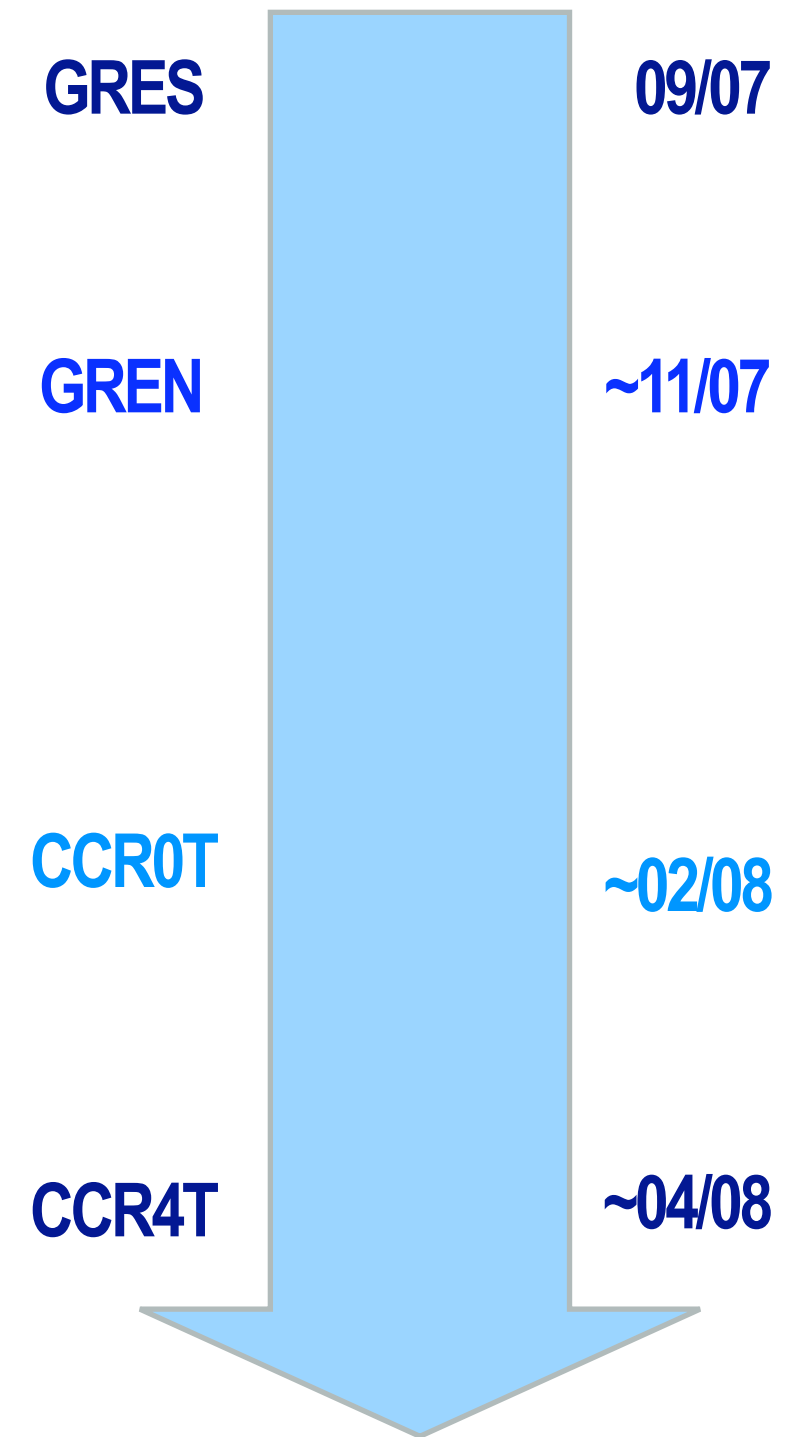
**Plenty of opportunities for more significant and visible contributions from DESY**

# Backup: Timeline



- Automated operation and shifters
- GUI: introducing layouts and plugins
- Remote monitoring (from FNAL)
- DQM common EventInfo and FileSaving modules
- Subdetector and trigger DQM fully integrated
- GUI: With fast and robust navigation
- Upgrade/simplify core DQM software
- DQM in Run Control (use HLTconfDB)
- Error reporting and persistency
- Offline DQM (Tier-0, proof of principle)
- File archive viewing directly from DQM GUI
- Additional navigation options and custom views
- GUI, history, trends, correlations with conditions
- Standardized DQ certification criteria

**DQM must be up to pp-collisions in June 08**



# Backup: Links



- **Project wiki-page**  
<https://twiki.cern.ch/twiki/bin/view/CMS/DQMInfrastructure>
- **Online DQM Planning Document**  
<http://indico.cern.ch/getFile.py/access?resId=0&materialId=1&confId=19909>
- **DQM GUI (on GR playback data)**  
<http://cmsmon.cern.ch/dqm/online-playback>
- **Web Based Monitoring and DQM Archive Browser**  
<http://cmsmon.cern.ch/>
- **EvF/DQM Meeting (Biweekly Thursdays 16-18)**  
<http://cmsevf.web.cern.ch/cmsevf/DQMMeetings.html>
- **Hypernews forum on DQM development**  
<https://hypernews.cern.ch/HyperNews/CMS/get/dqmDevel.html>