

Latest News & Other Issues



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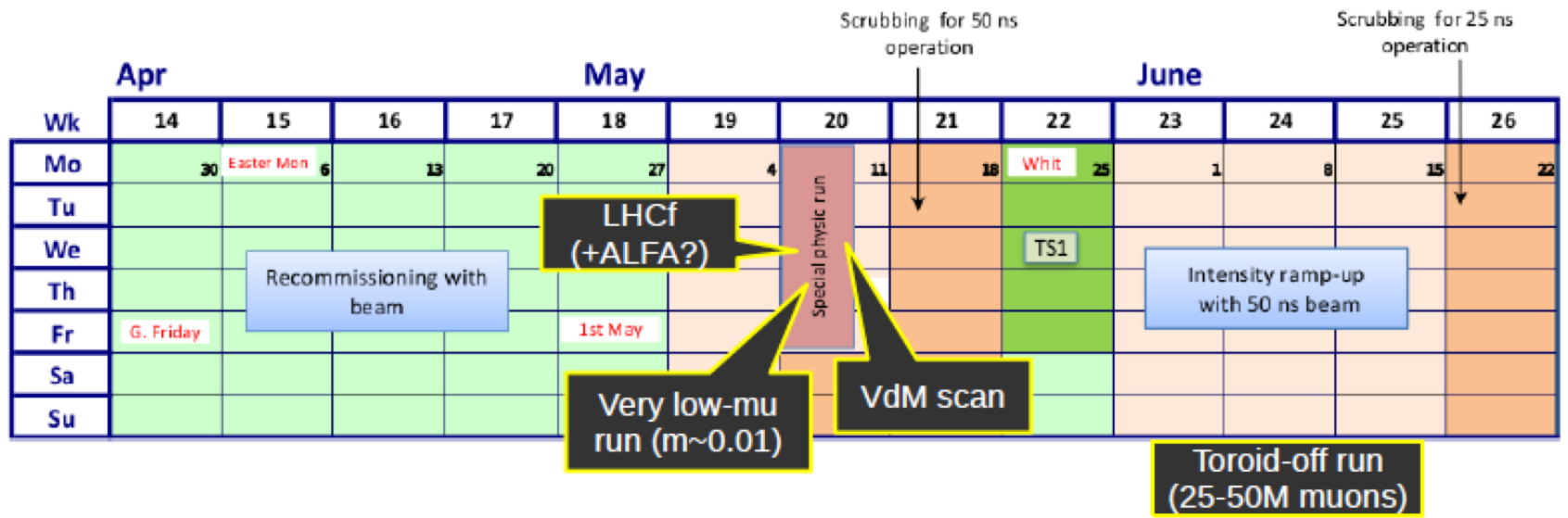
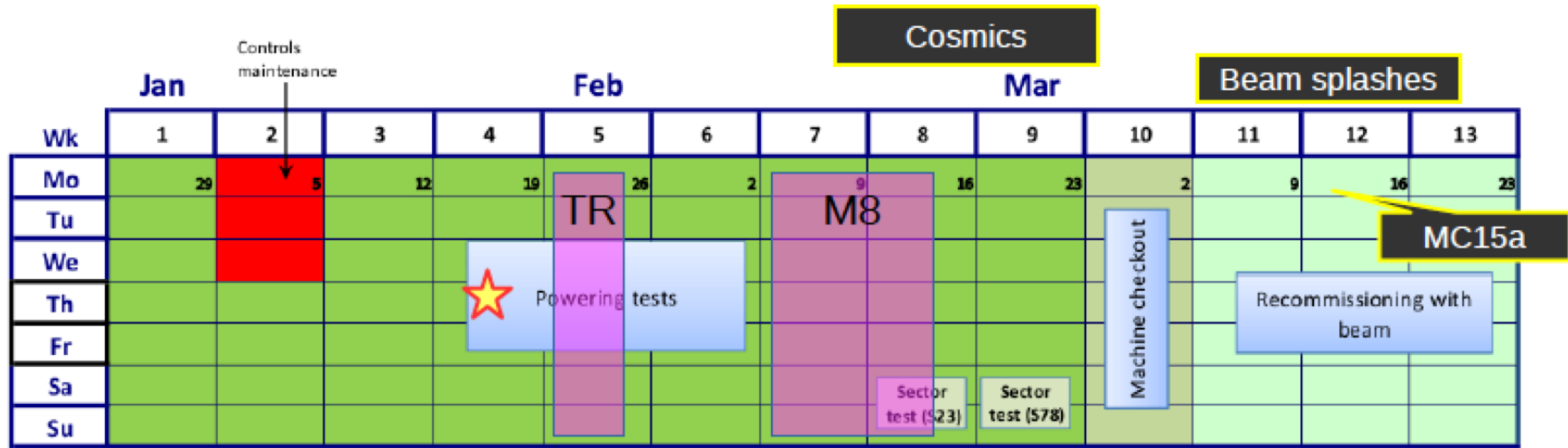
Jet Trigger Signature Group Meeting 2/2/2015

News

- Sample T a few days away, sample A too
 - Ready? Will find out soon
- M8 around the corner...
- Run-II starts this year!
 - < 2 months for first beams
 - < 2 months for launching MC15a (digi+reco)
 - < 4 months to first physics data

Starting with M8 we are in continuous running mode

- Also many special runs up-coming that will require dedicated menus



Menu for M8

- Keep existing chains:
 - j0_perf_L1RD0_EMPTY
 - j0_perf_L1MU10
 - j0_perf_L1J12
 - ht0_perf_L1J12
- Add chains to test :
 - em vs lcw clusters
 - Jes vs nocalib
 - area subtraction
 - PS vs FS
 - fat-jet chains, including reclustering
- starting from L1_J12:
 - j0_L1J12 default calibration etc (a4 tc em subjes) but with a hypo cutting looser than L1
 - j0_jes_L1J12 variation on calibration: jet calibration but no subtraction calibration
 - j0_lcw_jes_L1J12 variation on cluster calibration: lcw instead of em, with JES
 - j0_sub_L1J12 variation on calibration: no JES but with area subtraction
 - j0_nojcalib_L1J12 variation on calibration: no jet calibration
- fat jets
 - j0_a10_nojcalib_L1J12 fat jet (no reclustering) without calibration
 - j0_a10_lcw_sub_L1J12 fat jet (no reclustering) lcw clusters and area subtraction
 - j0_a10r_lcw_sub_L1J12 fat jet from reclustering, lcw clusters and area subtraction
- fat-jet chains starting from random
 - j0_a10_nojcalib_L1RD0 fat jet (no reclustering) without calibration
 - j0_a10r_lcw_sub_L1RD0 fat jet from reclustering, lcw clusters and area subtraction
- chain designed to actually cut on events triggered by L1, to improve monitoring
 - j15_L1J12
 - ht0_L1J12

Author Qualification Procedure

- See <https://indico.cern.ch/event/363542/contribution/0/material/slides/0.pdf>

Change to Qualification Procedure

- Each qualification project now requires a Technical Supervisor
 - This is in addition to the already existing “Local Institution Supervisor”
 - **After 4 months**, the Technical Supervisor receives an automatic email and needs to confirm in Glance that the qualification task is progressing as planned.
 - The qualification is put ON HOLD until this is confirmed!
 - **At the end** of the qualification period, the Technical Supervisor needs to provide a short description of the outcome of the qualification task (max 1000 chars)
 - Already now, we ask for this via email. It is just more formal now.
- Who is the Technical Supervisor?
 - *“person within the project/activity where the qualification task takes place who will supervise the work of the qualifier”*
 - In most cases, this should be one of the signature coordinators
 - But you could delegate it to someone working closely with the qualifier
 - Ideally local (institute) supervisor should not be the technical supervisor at the same time, but exceptions are possible of course

Jet Trigger Deliverables

- <https://docs.google.com/spreadsheet/ccc?key=0AokQEYCc3bjpdEIWR1I2MC1nR2U0Q0pzTFM3U1RleWc&usp=sharing#gid=14>

Trigger Tower full-scan (L1.5) chains	E	90 %	Peter Sherwood/Nuno/Craig/Sasha Mazurov	missing simple algorithm to unpack TTs (Craig) and debugging TT collection (Sasha); needed for data taking
Monitoring software for Run II	E	80 %	Lee Sawyer/Dilip Jana	needed for data taking
Validation software for Run II	E	80 %	Lee Sawyer/Sebastien Prince/Valentinos Chr.	independent of data taking
Add diagnostics algos to RTT validation tests	E	80 %	Valentinos Christodolou	independent of data taking
Testing pileup tools and stability vs pileup	E	80 %	Annabelle Chuinard/Erich Varnes	missing new MC to test PU subtraction; study independent of data taking
Jet cleaning selections in HLT	E	50 %	Peter Sherwood/Nuno Anjos/Caterina	debugging jet attributes; no major difficulties expected but takes time; independent of MC; needed for data
Implementation of simplified (Calo only) GSC in	E	50 %	Nuno Anjos	debugging jet attributes; other ingredients already in place; independent of MC; nice to have for data taking
Single jet menu optimization and	E	50 %	tba	Analysis framework written and in use; need to adapt to xAOD; offline analysis
Add trigger vs offline histos to monitoring and	E	20 %	Caterina Doglioni/Guy Koren	nice to have for data taking
Use of tracks and vertices from FTK tracking	E	10 %	Erich Varnes/Ruchika Nayyar	longer term
TLA-specific monitoring	E	0 %	Caterina Doglioni	needed for data taking
E/p trigger development for Run II	E	0 %	David Miller/Joakim Olsson	nice to have for data taking but alternative exists
Determine trigger-specific jet energy scale	E	0 %	M.Wobisch/Merlin Davies/Maria Roberta	Markus: central a4/Merlin: forward a4/Maria: fat jets; medium term; for analysis, not for data taking

Express stream

- See wiki:
https://twiki.cern.ch/twiki/bin/view/Atlas/ExpressStream#E34_menu_Physics_pp_v4_menu_coll
- The express stream has the following features:
 - Contain a subset of the physics data corresponding to ~ 10 Hz total.
 - Full events (unlike the calibration stream) but not for physics analysis.
 - Every event in the express stream will also be in the physics streams.
 - Will be reconstructed quasi-real time and looked at promptly (before the main reconstruction starts) for calibration and monitoring.
 - Used to check data quality, monitor the status of the detector, alignment and calibration, etc.
- Jet menu in express stream (looking for voluntary for contact person):

Trigger name	Desired rate in Hz	Short Motivation	DQ contact person
j25	0.8	from L1_RD0; calo & jet monitoring & calibration	Ricardo Goncalo
j60_L1RD0	0.2	jet/MET monitoring & calibration; bootstrapping	Ricardo Goncalo
j60	0.2	jet/MET monitoring, eta inter-calibration	Ricardo Goncalo
j60_280eta320	0.2	jet/MET monitoring, eta inter-calibration	Ricardo Goncalo
j60_320eta490	0.2	jet/MET monitoring, eta inter-calibration	Ricardo Goncalo
j360	0.2	from L1_J100; jet monitoring for high-pT chains	Ricardo Goncalo
j80_xe80	0.2	jet/MET monitoring for combined chain	Ricardo Goncalo