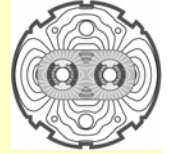


Shutdown Activities for LHC Beam Vacuum

Ray Veness / AT-VAC



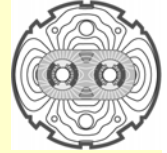
Contents



- 0 Status of vacuum in the experiments
- 0 Schedules for vacuum interventions
- 0 Beam vacuum issues for the shutdown
- 0 Update on consolidation activities



Status



O Resources

- O 1 vacuum team (Schneider/Calegari) for Ne venting
- O 1 mechanical team (Lepeule/Kos) for all other activities with support if needed from 'experts'

O CMS

- O Vacuum sector vented to ultra-pure Ne on 3/10

O ATLAS

- O Vacuum sector vented to ultra-pure Ne on 14/10
- O Check-out of vacuum instrumentation and re-configuring of supports for opening of the Endcap Toroid 24/10

O ALICE

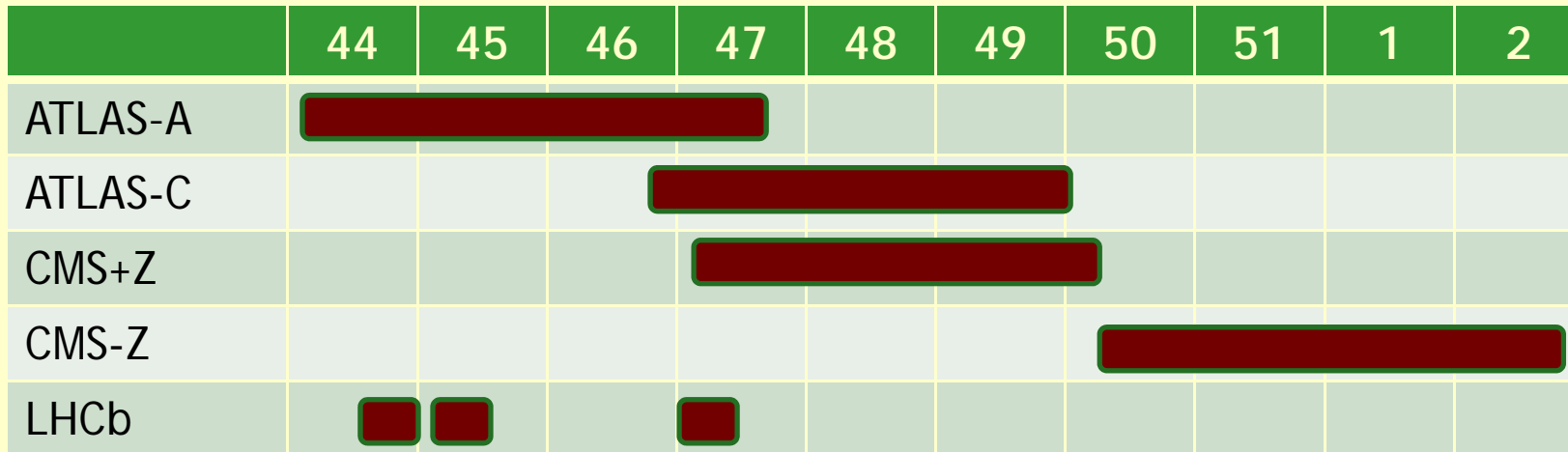
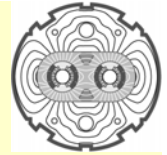
- O Vacuum sector vented to ultra-pure Ne on 21/10
- O 3x RB24 LSS-type vacuum chambers removed 24/10

O LHCb

- O Venting of the vacuum sector in progress 28/10



Schedule for Detector Opening



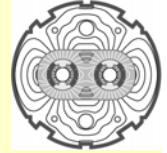
[Data given in week 43]

Comments:

- Schedules are not yet stable
- The bars do not represent periods of 100% activity for VAC
- There is one VAC mechanical intervention team, so conflicts may arise



Beam Vacuum Issues for the Shutdown



o ATLAS minimised ion pumps

- o Some abnormalities found during operation of the two minimised pumps at ± 4 m from the IP
- o Intervention needed to isolate the source of the problem

o CMS

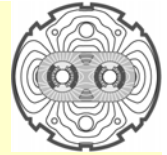
- o Movement of forward detectors close to HF beampipe (~14 m from IP)
- o Need to work with the experiment to ensure safe operation in 2009

o LHCb

- o The effect of outgassing from the VELO over the operational period is being analysed



Consolidation Activities: Update



- O Aluminium bellows for ATLAS and LHCb**
 - O Calculation of possible bellows profiles in progress
 - O Bellows testing machine re-commissioned in B.113
 - O Japanese aluminium bellows manufacturer visits mid Nov.
 - O Technical student starts in AT-VAC for 1 year on 1st Nov.
- O Replacement LHCb-UX85/3 beryllium chamber**
 - O Call for tenders send July '08
 - O Proposal for FC on 5th Nov '08
 - O 83 weeks production time - after negotiation!