<table>
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<tr>
<th>Presentation</th>
<th>Discussion</th>
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<td>News (Silvia, Michel)</td>
<td>The liaisons were asked if any groups plan to perform PV refinding (not just refitting) using Velo tracks in the PV container. So far, no analysis has used this feature, but some groups might plan to do this in the future. Michael Alexander and Agnieszka Dziurda were asked to have a look at Sim09 to compare the IP and PV resolution. The results (together with the ones from tracking efficiency and multiple scattering) have to be reported to the simulation group until February 2nd. A talk is available at LHCP about “Real-time physics: novel concepts for trigger, calibration &amp; alignment, and data processing with LHCb.”</td>
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<td>Roundtable with liaisons</td>
<td>Mark: IT2 has to be moved up by ~1mm when being accessed.</td>
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| Reconstructing 2015 PbPb data (Johan, Wouter) | A test was made to reconstruct PbPb data, using the standard reconstruction, but without a beam-spot cut, no restriction on the PV position, and loosened (or no) GECs. As expected, there are some very busy events (taking a very long time to reconstruct), but also many empty ones from peripheral collisions. A clear degradation of the OT performance can be observed (t0, drifttime). A second bump in the PV-z distribution can be observed. A clear large increase of ghost for events with more than 20k velo clusters. Open points:  
  • Check which GEC works best.  
  • Check ghost-rate with MC |
| PV resolution on data (Agnieszka)  | The results obtained now agree (on 2012 data) with what Chris Thomas obtained, before there were small differences in the method. The PV resolution in 2015 is slightly better in x/y than in 2011/2012 (7%) and much better (20%) in z. The MC shows a slightly worse resolution for low-multiplicity PVs, but the shapes agree well. Open points:  
  • Check if the observed difference could be due to the velo alignment quality or/and to the use of Velo tracks instead of Best tracks |
| **Update on time resolution** (Mengzhen) | The study on the decay time resolution was finalized. The idea is to obtain the real decay time resolution, using prompt decays, and then folding this factual dependency with the spectrum of real Bs->J/psi phi decays. Using this method. The same resolution was obtained in 2012 as in the detector performance paper. For 2015, the resolution is slightly better on average. 
Open points:
  - Make sure the shifted spectrum of the estimated time resolution does not cause the effect of improvement (i.e. no implicit cut is placed).

| **Momentum resolution in 2015** (Christian) | The momentum resolution was determined using J/psi -> mu mu decays, using the known mass of the J/psi. The method is the same as used for 2011 data. When comparing Stripping 17 (2011 data) and Stripping 20 (2012 data), the resolution is much better for stripping 20, but showing the same shape as stripping 17. The resolution is worse for 2015 than for stripping 20, mostly for low momenta. 
Open points:
  - Understand differences and check on MC.
  - Can we trust sigma_cosTheta from MC?

| **Tracker Alignment update** (Maurizio) | Following the procedure used in the Z-alignment, the internal misalignment of the Inner Tracker was corrected aligning also for the DoF TxRz for the IT ladders and layers. This results in an improved track-chi2. Furthermore the inner modules of the OT were split for the alignment, resulting in a small improvement in track-chi2. 
Open points:
  - Study the inclusion of high-pT tracks.
  - Study alignment stability over 2015 for each sub-detector
  - Tune better the convergence criteria.
  - Study the correlation of BCAM measurements and the alignment results |