<table>
<thead>
<tr>
<th>Presentation</th>
<th>Discussion</th>
</tr>
</thead>
</table>
| **News**     | • Next week is 6th software upgrade hackathon and C++ course. Please join!  
• Alignment and AlignmentOnline v11r2 have been released.  
• We are looking for:  
  o T&A – Simulation liaison  
  o T&A – Stripping liaison  
• The reconstruction deadline is 31st of March. Please be on time! |
| **Liaisons round table** | • Nothing to report |
| **MC upgrade production (Mark Whitehead)** | • We need a new MC production for the upgrade.  
• Baseline is to request 100k for signal (each PWG provides 2-3 decays) plus 30M min biases.  
• Significant changes in the SciFi and VELO. We need to wait for the new simulation release which will be done around Easter.  
• After some offline discussion it has been decided:  
  o Firstly, request small min bias sample to test new reconstruction  
  o Set up two reconstructions: tight and loose one. Which will be run one after another in the production resulting with two different locations in the bkk.  
  o Send the entire production.  
• More news in mid April - May. |
### Status of simplified geometry for Upgrade (Tomasz Szumlak)

- Simplified geometry for upgrade has been deployed in DDDB.
- Recently with simplified geometry we loose about ~0.3 per mille of long tracks.
- There was a slightly different VELO RF model, based on an obsolete file. Now we switched to the new model.
- We are able to produce material scans.
- We have the next iteration of XML which should correspond to the latest full geometry in DDDB.
- To-do list:
  - Need to recheck dimensions of the simplified volumes
  - Perform detailed FGeo vs SGeo studies (material scans). Some hot spots to be understood.
  - Need to add/modify initial volumes.
- An update is expected in about 1-1.5 month(s) timescale.

### Effect of different upgrade VELO designs (Mark Williams)

- The VELO upgrade group is considering two options for cooling needs. Plan A: best cooling performance, least material, more expensive. Plan B: cheaper, potentially safer. Plan A is more preferred (even if more expensive). An input from the tracking experts is appreciated. Final decision should be made in 2-3 months timescale.
- Two new designs are in a private DDDB version and soon will be released.
- Tracking studies done using MC sample of B->KPi. It is compared with TDR. Comparison should be signal-type independent.
- Many quantities already studied in details: Tracking Efficiencies (using PrChecker), PV and IP resolutions. In all cases Plan A performs slightly better.
- It has been requested to check PV efficiency/resolution using PrimaryVertexChecker instead of TrackIPResolutionChecker.
| Downstream update for 2017 (Adam Dendek) | • An update on presentation from 7th February.  
• The preliminary studies have been showed on Connecting the Dots workshop (LHCb-TALK-2017-048):  
  o [https://cds.cern.ch/record/2255842?ln=en](https://cds.cern.ch/record/2255842?ln=en)  
• Presented studies are based on the simulation samples (B-> J/Psi Ks). A ROC curve shows potential improvements. This has to be followed by:  
  o Finding an optimal working point  
  o Checking performance on data  
  o Implementing second classifier  
• Michel will contact Adam offline and try to converge. Still the aim is to have the updated reconstruction for 2017 with the commissioning deadline: 31st March 2017. |