TOP grounding/shielding scheme @ 2015

- Sens
- Belle-II structure
- Tighty connected
- LV power supply returns tied together here, and also to TOP Al frame
- PMT case at -HV
- TOP Al frame
- CS1 support
- FE
- E-hut
- LV power supply return tied together here, and also to TOP Al frame
- TOP Al frame
- LV
- BE
- E-hut
- 2F
- 1F
- Cal
- 2015-02-03
- Grounding / EMC session @ B2GM20
- M. Andrew
<table>
<thead>
<tr>
<th>PXD</th>
<th>SVD</th>
<th>CDC</th>
<th>TOP</th>
<th>ARICH</th>
<th>BECL</th>
<th>EECL</th>
<th>BKLM</th>
<th>EKLM</th>
<th>Timing</th>
<th>DAQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twisted pair without shield, SVD to Deck to FADC (spacers need to be installed to FADC to copper connector). Will be shielded.</td>
<td>No shield for LV. Additional shield outside of the magnet.</td>
<td>(see. Timing,DAQ part)</td>
<td>signal digitization happens on FEE inside detector; CAL signal shield is tied to ground at both ends</td>
<td>(see. Timing,DAQ part)</td>
<td>shielded cable, but single connection at preamplifier side.</td>
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<td>(twisted pair without shield, already installed, No immunity issue. No emission issues if shield is installed.)</td>
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<td>Shielded RJ45</td>
<td>Optical cables only</td>
</tr>
<tr>
<td>2. Bonding btw signal cable and shield</td>
<td>2. Bonding btw HV/LV cable and shield</td>
<td>3. Controlled shield/ground bonding</td>
<td>8. EMC plan</td>
<td>installation schedule</td>
<td></td>
<td></td>
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<tr>
<td>PXD SVX common. Fernando and Markus are discussing this issue now.</td>
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<td>Plan</td>
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<td>LV shields tied to 4 points at end of CBB</td>
<td>prototypes run in Fuji for ~1 yr; latest module just went together; will have to test again in situ</td>
<td>2016-03</td>
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