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Low Lumi Analyses............................................................................................................................................1
Low Lumi Analyses

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<th>For Report?</th>
<th>Manpower</th>
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<tr>
<td></td>
<td>Soft Diffraction</td>
<td>&gt; 10 mb</td>
<td>1 million</td>
<td>ATLAS, CMS, LHCb</td>
<td>Yes</td>
<td>-</td>
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<tr>
<td></td>
<td>Particle spectra</td>
<td>&gt; 10 mb</td>
<td>20 million</td>
<td>All</td>
<td>-</td>
<td>-</td>
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<tr>
<td></td>
<td>Energy flow</td>
<td>&gt; 10 mb</td>
<td>1 million</td>
<td>ATLAS, CMS, LHCb</td>
<td>Yes</td>
<td>-</td>
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<tr>
<td></td>
<td>Underlying Event</td>
<td>mb - /b</td>
<td>1 million</td>
<td>ATLAS, CMS, TOTEM</td>
<td>Yes</td>
<td>-</td>
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<tr>
<td></td>
<td>Diffraction in Proton-Lead</td>
<td>&gt; 10 mb</td>
<td>1 million</td>
<td>All</td>
<td>Maybe</td>
<td>-</td>
</tr>
</tbody>
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(1) Investigate sensitivities to pp, pPom, PomPom using proton tag(s).

<table>
<thead>
<tr>
<th>Events with a Hard/Semi-hard Scale</th>
<th>Process</th>
<th>Required Events</th>
<th>Experiments</th>
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<tr>
<td></td>
<td>Diffractive Dijet Production</td>
<td>2 nb</td>
<td>ATLAS, CMS, TOTEM</td>
<td>Yes</td>
<td>-</td>
<td>Good place to look at gap survival</td>
</tr>
<tr>
<td></td>
<td>Central jet + identified forward p / n or π ^ 0</td>
<td>O(μb)</td>
<td>ATLAS, CMS, TOTEM</td>
<td>-</td>
<td>-</td>
<td>Neutrals unlikely at ATLAS</td>
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<tr>
<td></td>
<td>Exclusive Production</td>
<td>O(thousands/channel)</td>
<td>All</td>
<td>Select channels</td>
<td>-</td>
<td>jj, π π, cc, μμ, γγ, K K, pp, χχ, X (38)</td>
</tr>
</tbody>
</table>

(2) To be split final state wise with medium lumi.