LSWG – MD requests for 2016

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BSRT studies

- Aim: Characterize the performance of the BSRT in different conditions. In particular verify the gain using 250nm light.
- Impact: Information needed for the future developments of the BSRT, in particular for HL-LHC
- Beam: B1+B2, few bunches, 6.5 TeV
- Time: 6 hours effective time at 6.5 TeV (>=MD1)

BSRT-Halo studies

- Aim: Characterize the performance of the halo monitor under development (coronagraph from KEK).
- Impact: Information needed for the future developments of the halo monitor, in particular for HL-LHC and LRBB compensation.
- Beam: B2, few bunches, 6.5 TeV
- Time: 8 hours effective time at 6.5 TeV (>=MD2)

BWS studies

- Aim: Characterize the performance of the wire scanners: linearity, saturation, calibration.
- Impact: The WS are setting the absolute scale of all the other emittance monitors.
- Beam: B1+B2, few bunches, 450GeV + 6.5 TeV
- Time: 6 hours (>=MD1)

BBQ studies 1

- Aim: Study chromaticity measurements with small and slow radial modulation.
- Impact: Prove if it can be used in operation.
- Beam: t.b.d.
- Time: 4 hours (>=MD1)

BBQ studies 2

- Aim: Calibrate amplitude of BBQ using standard BPMs (and DOROS).
- Impact: May prove very useful for the operation.
- Beam: B1+B2, pilots at 450GeV
- Time: 4 hours (>=MD1)

BPM studies 1

- Aim: Investigate the absolute scale of the BPMs using bumps.
- Impact: Many clients rely on an accurate position measurement.
- Beam: B1+B2, pilots at 450GeV
- Time: 4 hours

BPM studies 2

High Priority

- Aim: Test new electronics for the interlock BPMs.
- Impact: Needed for the aforementioned development.
- Beam: B1+B2, pilots and nominal at 450GeV, scraping
- Time: 4 hours (>= MD3)

DOROS studies 1

- Aim: Coupling measurement with very small and long transverse damper excitation.
- Impact: assess whether this would work with physics beams.
- Beam: B1+B2, t.b.d.
- Time: 4 hours (>= MD1)

DOROS studies 2

- Aim: Directivity measurement in Q1 BPMs using RF cogging.
- Impact: assess whether this would work with physics beams.
- Beam: B1+B2, few nominals at 450GeV
- Time: 4 hours (>= MD1)

Schottky studies

High Priority

- Aim: Assess the performance of the new Schottky electronic (chroma, emittance, reflections etc.).
- Impact: needed to advance on the Schottky system.
- Beam: B2, pilots, nominals, 25ns trains at 450GeV
- Time: 4 hours (>= MD1)

Multiband Instability Monitor studies

- Aim: Test the new MIM electronic detection system with well defined beam instability. Compare its performance and sensitivity to the BBQ and Head-tail monitors.
- Impact: needed to advance on the MIM system.
- Beam: B1+B2, nominals at 6.5 TeV
- Time: 8 hours (>= MD1)