OMC review - first thoughts



R. Tomás

following discussions with O. Brüning, M. Giovannozzi and F. Zimmermann. LCU, March 2013

2011 OMC workshop: http://indico.cern.ch/conferenceOtherViews.py?confld=132526

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OMC review plan and possible goal

- ★ 2-3 days around June 17
- ★ within EuCARD(2)
- Possible Goal: Review the readiness of high resolution optics measurements and corrections after LS1.

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Operational aspects

- * Ramp & squeeze, M. Solfaroli
- \star β^* leveling, collide & squeeze,
- ⋆ FiDeL status,
- ⋆ Nominal Vs ATS, incorporate dipole b₂ in design, collision scenarios,
- Non-linear modelling and machine set-up,
- LSA upgrades,
- On-line modelling,

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Instrumentation

- * Requirements from BI,
- * AC dipole upgrades, N. Magnin
- Aperture kickers,
- ⋆ The main BPM system, longer acquisitions,
- ⋆ New BPMs after LS1, M. Gasior
- * Automatic coupling correction, T. Persson
- ⋆ BPM non-linear response correction,

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Optics measurements and corrections

- Improvements in accuracy and error reconstruction, A. Langner
- Chromatic coupling correction, Y. Levinsen
- Automatic local error correction,
 P. Skowronski
- Measurement of amplitude detuning with AC dipoles, S. White
- ⋆ K-modulation, G. Trad?
- ⋆ OMC codes, T. Bach?

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Early commissioning stage

- ⋆ Plan, sector tests?,
- Threader, tune and BPMs and orbit corrector polarities,
- Aperture checks/meter,
- Polarity checks of non-linear circuits, M. McAteer.

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