

# 2012 MD#1 Emittance Preservation

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V.Kain

G. Arduini, B. Dehning, A. Guerrero, M.Kuhn,  
F.Roncarolo, M. Sapinski, M. Schaumann

# MD#1 2012 – Emittance Preservation

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**Aim: Characterize the growth from SPS flattop to end of squeeze for the 2012 LHC cycle**

Draft Proposal:

- fill the LHC with 12 bunch injections and measure the emittances at each transfer in the SPS and the LHC. (Need to test this before)
- Measure emittance evolution at injection 30 minutes with damper at injection settings
  - 12 bunches
- Measure emittance evolution at injection 10 minutes with damper at injection settings, 20 minutes at ramp gain settings – 12 bunches
- Measure with at least 12 bunches
- through the ramp: BGI and wire scanners
- through the squeeze: BSRT and wire scanners

## Plan / Constraints

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- 8 hours in total should be ok
- Need calibrated instrumentation → likely needs to come after BI MD
- WS – BGI experts on duty trip until Apr 21<sup>st</sup> night