

# Squeeze study for LHCCWG on November 29th

Proposed topics to be covered (R. Bailey) shared in three presentations (LOC, collimators and operation)

- mechanics; is it any different from the ramp?
- intermediate optics; how many and which ones?
- influence of optics changes on crossing angle (when we have one)?
- energy; I guess we start at top energy (is this an issue?)
- collimators; when do we move them?
- do 1 and 5 together?
- what about 2 and 8?
- machine protection; anything to do?

# Proposal for LOC contributions - I

- **IR2 (JJ -> to be done for LTC follow-up anyway):**
  1. do we need to change optics/crossing scheme during ramp?
  2. Compute transitions between injection optics and 7 TeV one (if necessary)
  3. Compute un-squeeze
- **IR8 (YP):**
  1. do we need to change optics/crossing scheme during ramp?
  2. Compute transitions between injection optics and 7 TeV one (if necessary)
  3. Compute squeeze
- **At least points 1. and 2. should be presented at LHCCWG.**

# Proposal for LOC contributions - II

- IR1/5 (MG & SF):
  1. do we need to change optics/crossing scheme during ramp?
  2. Evaluate dynamical effects (beta-beating, closed orbit deformation between matched optics)
  3. How many matched optics do we need?
- In addition, strategy for collimators should also be discussed jointly with optics...
- Follow-up in LOC at meetings on November 6<sup>th</sup> and 20<sup>th</sup>.