### Status WP5

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20.10.2010

#### Status

- Delay due to unforeseen issues at CERN, requiring my full attention.
- Things are defined but help in formalities (filling in the forms) would be very useful and welcome. The templates I have...

# Objectives

- WP 5.1: Coordination & Communication
  - To coordinate and schedule work package tasks
  - To monitor work progress and inform the project management and work package participants
  - To follow up the WP budget and use of resources
  - To prepare internal and deliverable reports
- WP 5.2: IR Simulations of Halo Loss
  - Assess locations and magnitudes of halo loss in the IR's for various upgrade scenarios.
  - Assess impact of imperfections.
- WP 5.3: IR Simulations of Energy Deposition
- WP 5.4: Design of IR Collimation

#### WP Structure I

- WP 5.1: Coordination and Communication
- WP 5.2: IR Simulations of Halo Loss
  - Collimation Sixtrack: CERN ABP, Valencia
  - Collimation Merlin: Manchester
  - Collimation Geant: Royal Holloway
- WP 5.3: IR Simulations of Energy Deposition
  - Mars: FNAL
  - FLUKA: Manchester
  - Geant: Royal Holloway

#### WP Structure II

- WP 5.4: Design of IR Collimation
  - CERN ABP
  - Valencia

# Objectives

- WP 5.1: Coordination & Communication
  - To coordinate and schedule work package tasks
  - To monitor work progress and inform the project management and work package participants
  - To follow up the WP budget and use of resources
  - To prepare internal and deliverable reports
- WP 5.2: IR Simulations of Halo Loss
  - Assess locations and magnitudes of halo loss in the IR's for various upgrade scenarios.
  - Assess impact of imperfections.

# Objectives

- WP 5.3: IR Simulations of Energy Deposition
  - Assess locations and magnitudes of halo loss in the IR's for various upgrade scenarios.
  - Assess impact of imperfections.
- WP 5.4: Design of IR Collimation
  - Study required collimation to keep losses at the same level or below before the upgrade.
  - Integration of collimators, new layout and optics.
  - Feed forward to simulation WP's.

### Milestones

- M12: Set up of models and implementation of upgrade optics.
- M24: Assessment of beam halo losses in various upgrade scenarios.
- M36: Definition of new IR collimation solution.
- M42: Verification of new IR collimation solution in simulations. Possible iteration in design.
- M48: Final report.

#### Resources

 Required support per year was defined, assume 100% funding from EU, if funding ratio is less then staff numbers must be increased to allow hiring of full post-docs and full students per lab.

# Required Resources

- Coordination
  - 0.1 staff,
  - 30 kchf travel,
  - 20 kchf material
- CERN ABP
  - 0.2 staff,
  - 1 post doc,
  - 1 phd,
  - 15kchf travel,
  - 10 kchf materials

- Valencia
  - 0.2 staff,
  - -1 post doc,
  - 15 kchf travel,
  - 5 kchf materials
- Manchester
  - 0.2 staff,
  - 1 post doc,
  - 1 student,
  - 15 kchf travel,
  - 5 kchf materials

- Royal Holloway
  - 0.2 staff,
  - 1 post doc,
  - 1 student,
  - 15 kchf travel,
  - 5 kchf materials
- FNAL
  - 15 kchf travel
- SLAC 15 kchf travel (still to be confirmed)