



Beam Physics Work 2011-2016

D.S. 3.11.2011



List of Workpackages

Area packages

- Main beam electron source (Steffen Doebert)
- Main beam positron source (Steffen Doebert, interim)
- Damping rings (Yannis Papaphilippou)
- RTML: ring to main linac transport (Andrea Latina)
- Two-beam acceleration (D.S. interim)
- BDS: beam delivery system (Rogelio Tomas)
- MDI: machine detector interface (Lau Gatignon)
- Drive beam complex (Bernard Jeanneret)

Integrating packages

- Integrated design (D.S.)
- Simulations and integrated studies (Andrea Latina)
- Feedback design (D.S., interim)
- Machine protection and operation (Michael Jonker)
- Background (D.S., interim)
- Polarisation (?)



Some Comments

We will have to address a number of issues to move from a conceptual to a more technical design

- e.g. further improve BDS alignment

Will have to define a staged approach for CLIC

- This may have to be repeated depending on LHC findings

Will have to define basic parameters for each stage

- Preliminary choices might be reasonably straightforward
- But better understanding of optimisation and limitations is needed
 - e.g. an update of the cost model

We will have to make a design for each energy stage and find a path between them

- Detailed for the first stage
- Less detailed for the others
- Will need to iterate on a number of areas and systems for cost optimisation and risk minimisation