S. Guiducci BTR, LNF 8 July 2011

- Beam dynamics and collective effects
- System conceptual design and final specifications
- Costing
- TDR Documentation
- TDR Writing

- Beam dynamics and collective effects
  - Dynamic aperture with magnet errors
  - Sensitivity to misalignment errors
  - Evaluation of IBS effect
  - Evaluation of FII effects for the new lattice (done for DSB3)
  - Evaluation of e-cloud effects for the new lattice including full 3D simulation of synchrotron radiation and high power configuration
  - Evaluation of impedance (done for DCO4) and single and multibunch instability thresholds for the new lattice
- System conceptual design and final specifications
- Costing
- TDR Documentation
- TDR Writing

- Beam dynamics and collective effects
- System conceptual design and final specifications
  - Fill pattern and harmonic number selection
  - Final straight sections layout
  - Complete specifications for CFS group
  - Transfer lines up to the interface point for the 2 e<sup>+</sup> rings option (including splitter and merger for 2 e+ rings)
  - Define number of correctors/skews
  - Vacuum system design
- Costing
- TDR Documentation
- TDR Writing

Including selfreproducing filling