LHC Commissioning and Upgrade activities

- Optics design and development for LHC and its transfer lines.
- Study the magnet field imperfections and aperture of the machine as installed.
- Study the commissioning and machine operation scenarios, measurement procedures, including specifications of LHC beam parameters.
- Provide support for the operation of the LHC during its initial commissioning phase.
- Development and maintenance of software tools for accelerator design and operation.
- Project coordination for the LHC collimation system.
- R&D efforts related to the Phase II LHC collimation system.
- Study the LHC beam limitations and ways to overcome them to reach and exceed LHC nominal performance.
- Coordination of the HHH FP6 network.
- Contribution to CARE / EUCARD related R&D activities (LHC upgrade studies).
- Teaching activities and seminars.