

## **Things to do**

### **1 Experimental hall**

**Size:** 2 detectors?

Beam height above floor (sufficient for a 1 TeV detector for a later machine upgrade to higher energies), cranes (crane height, capacity, number..), service galleries

**Detector platforms:** Push-pull?

Seize of platform, room needed between hall floor and rear side of platform, air pads versus rollers, height adjustment of platform?

Platform moving system, guiding system, fine adjustment in beam position

**ILD endcap opening procedure:** remote controlled valves

**Earth quake protection in underground areas:** for detector above platform isolation (friction pendulum isolators?), system in parking position with end-caps open? Platform isolated?

**ILD myon-chamber installation:** trench in parking position in between hall and alcoves?

**Final focus:** L\*?

Position QD0, QD0 support; QF1-support

**Survey:** Connection between e- and e+ beamlines, alignment of detector to beamline, detector internal alignment, subdetector alignment, QD0 alignment system (magnetic axis, remote control system..)

**Shielding:** Pacman or different system (sliding walls, removable shielding blocks,...), possible interference with IP area wall and tunnel connection construction

**Detector services:** cryogenic distribution system, cabling, interface to CFS, utility caverns...

**Underground workshops:**

### **2 On surface**

**Detector installation areas:** surface facilities (detector subdetector assembly, yoke assembly, Detector assembly...)

**Control rooms:**

**Earth quake protection during surface installation:**

**Detector platforms in installation areas:** Seize of platforms, moving system,

**Gantry crane:** capacity check, installation requirements

**Transport to IP area:** road capacities, port facilities ...