



Sample Project: ATLAS and CMS superconductor magnet control and safety system consolidation

Code	PH4122
Programme	FCT
Department	PH
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Title

ATLAS and CMS superconductor magnet control and safety system consolidation

Description

The ATLAS and CMS are the largest experiment of the LHC equipped with complex superconductor magnets which are continuous monitored and surveyed by different critical control systems based on diverse technology: PLC (Programmable Logic Controllers), SCADA (Supervisory Control and Data Acquisition), FPGA, CERN custom electronic instrumentation hardware.

The trainee will have the opportunity, in a first stage, to learn about the latest techniques about superconductor magnet instrumentation and later on participating in the upgrade program of the Magnet Safety System (MSS) of the LHC magnets. He will take part in all the activities of the team contributing in the development, test and commissioning of the CERN custom electronic interfaces interfacing the critical magnet instrumentation and the safety system.

Skills

Digital and analogue circuit design, printed circuit board design, instrumentation, automation

Disciplines

Electrical Engineering, Electronic Engineering, General Engineering

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