



Sample Project: Highly reliable transmission links for LHC machine protection

Code	TE5948
Programme	FCT
Department	TE
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Updated by	90920 - Ms. Mariane Catallon
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Title

Highly reliable transmission links for LHC machine protection

Description

High energy machines like the LHC require both, highly reliable as well as available protection systems for the protection of sensitive accelerator equipment against damage. Approved LHC upgrades will impose additional requirements on the LHC beam interlock system, requiring a consolidation of the fibre optics links used today for the transmission of critical information around the LHC ring. You will participate to the design, prototyping and deployment of novel, highly reliable transmission links for the upgrade of the present LHC beam interlock system, deployed in a major part of CERNs accelerator complex.

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Skills

Networks and Systems: Optical information networks. Theory of Electrical Engineering: Signal processing <table border="0"

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<tr height="253">
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  Electronics/Electrical Engineer<br />
  Digital electronics design, VHDL and electronic system engineering.&nbsp; Ability to work in a team and to participate in design
  discussions. Knowledge of reliability concepts is a plus.&nbsp;</td> </tr>
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Disciplines

Electrical Engineering, Electronic Engineering, General Engineering

To edit this project go to https://hrapps.cern.ch/auth/f?p=131:4:::P4_ID:5948