



Sample Project: High speed optical data transfer for high energy physics experiments

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| Code | PH1356 |
| Programme | TRAIN-PTES |
| Department | PH |
| Responsible | 39187 - Mr. Francois Vasey |
| Created by | 39187 - Mr. Francois Vasey |
| Updated by | 54482 - Ms. Sophie Baron |
| Date Created | 12-MAY-10 |
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Title

High speed optical data transfer for high energy physics experiments

Description

Study and evaluation of high speed optical data transmission systems for high energy physics experiments. The candidate will develop test benches and procedures for 10Gbps and above data rates, and will characterize devices and systems developed in-house or sourced from commercial suppliers. He/she will investigate in particular low power designs, low footprint packages and resistance to harsh environments.

Skills

Applied Physics: Analysis and simulation for particle detectors, Cryogenics , Vacuum . Low and High Frequency Engineering: Active and passive elements, Filters, Measurement techniques, Microwave engineering, Photonic. Networks and Systems: Communication networks, Integrated circuits, Micro systems engineering, Optical information networks. Theory of Electrical Engineering: Signal processing

Disciplines

Applied Physics, Electronic Engineering

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