# Sample Project: Design of a new 5 to 6 tesla class superconducting solenoid for a...

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| Code | PH1354 |
| Programme | TRAIN-PTES |
| Department | PH |
| Responsible | 44604 - Dr. Herman Ten Kate |
| Created by | 44604 - Dr. Herman Ten Kate |
| Updated by | 54482 - Ms. Sophie Baron |
| Date Created | 26-MAR-10 |
| Date updated | 16-JUN-14 |

## Title

Design of a new 5 to 6 tesla class superconducting solenoid for a...

## Description

At CERN the design and R&D has started for the future magnet system required in a linear collider detector. A superconducting solenoid of 5-6T is foreseen for which a disign has to be made and the superconducotr developed. You will join the design team and contribute on one of the key issues like superconductor development, coil winding design, stability studies, quench propagation, detection and protection. I hope you can make it and join my team!

## Skills

Applied Physics: Analysis and simulation for particle detectors, Cryogenics , Vacuum . Mechanical Engineering: Computer integrated/aided design, Heat Transfer, Numerical techniques and software (e.g. ANSYS, Abaqus...), Structural mechanics and machine development

## Disciplines

Applied Physics, Mechanical Engineering