

Title: Superconducting Magnets

Lecturer: Dr Ezio Todesco

Date and Times: 30th July at 10:15

Summary of the proposed talk: Starting from the beam requirements for accelerator magnets, we will outline the main issues and the physical limitations for producing strong and pure magnetic fields with superconductors. The seminar will mainly focus on the magnets for the accelerator, and give some hints on the magnets for the experiments.

Prerequisite knowledge: Basic knowledge of Maxwell equations, and linear optics for particle accelerators (FODO cell, beta functions).

References: K. H. Mess, P. Schmuser, S. Wolff, "Superconducting Accelerator Magnets" World Scientific, Singapore (1996).

Biography-

Brief CV: Ph. D. in Physics at University of Bologna. From 1989 to 1998 has studied nonlinear dynamical systems with applications to single particle beam dynamics in accelerators. Since 1998 at CERN in the Accelerator Technology Department, in charge of the follow-up of field quality in the main dipoles and quadrupoles of the LHC.

Publications:

Author of 150 publications and one book.