Title: Detectors

Lecturer: Dr Werner Riegler

Date and Times:

- 7th July at 10:15
- 7th July at 11:15
- 8th July at 10:15
- 9th July at 11:15
- 11th July at 11:15

Summary of the proposed talk:

This lecture will serve as an introduction to particle detectors and detection techniques. In the first lecture, a historic overview of particle detector development will be given. In the second lecture, some basic techniques and concepts for particle detection will be discussed. In the third lecture, the interaction of particles with matter, the basis of particle detection, will be presented.
The fourth and fifth lectures will discuss different detector types used for particle tracking, energy measurement and particle identification.

Prerequisite knowledge and references:

Some basic knowledge of physics is helpful. Most parts of the lecture do not require a very detailed knowledge of physics.

Biography-

Brief CV:

Born 1970, Austria. Studied Physics at the University of Technology in Vienna. First visit to CERN in 1994 as a summer student.
Doctoral Student in the ATLAS collaboration from 1994 to 1997. Development of the ATLAS muon spectrometer. PostDoc at Harvard University from 1997-2000 in the ATLAS and CDF collaboration. Development of detector frontend electronics.
CERN Staff member in the LHCb collaboration from 2000-2004. Development of the LHCb Muon Trigger. General detector physics studies.
CERN staff member of the ALICE collaboration from 2004-present. Member of the technical coordination team.