



UNIVERSITÀ DI PISA
DIPARTIMENTO DI INGEGNERIA DELL'INFORMAZIONE
Dottorato di Ricerca in Ingegneria dell'Informazione

Doctoral Course

**“RF, Beam Instrumentation and Electrical Engineering
for Particle Accelerators”**

Manfred Wendt

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Short Abstract: This lecture gives an introduction to RF engineering and beam instrumentation techniques for charged particle accelerators, tailored for electrical engineers. The lecture is based on material taught at the JUAS and CERN Accelerator Schools, as well as on tutorials given at related workshops and conferences. Permitting time and equipment, a few computer and laboratory exercises will add some practical examples and hands-on experience.

Course Contents in brief:

- Introduction to charged particle accelerators
- RF engineering
- Beam instrumentation techniques
- Accelerator applications (job opportunities)

Total # of hours: 16

References:

[1] JUAS RF Course

[2] CERN Accelerator School beam instrumentation lecture

CV of the Teacher

Date of birth: 21. December 1956

Place of birth: Hamburg (Germany)

1979 – 1984: Electrical engineering at the University for Applied Sciences Hamburg

1989 – 1995: Part-time study electrical engineering (MSc) at the University of Hagen

1985 – 2005: Staff member at DESY (Hamburg, Germany), Deputy of the beam instrumentation and diagnostics group, crew-chief of the accelerator operations (part-time)

2005 – 2012: Staff member at Fermilab (Batavia IL, USA), Head of the AD-Instrumentation Department

since 2012: Staff member at CERN (Geneva, Switzerland), electrical engineer in the beam instrumentation group

Room and Schedule

Room: *Aula Riunioni del Dipartimento di Ingegneria dell'Informazione, Via G. Caruso 16, Pisa – Ground Floor*

Schedule:

Day 1 – 23 May 2016

Day 2 – 24 May 2016

Day 3 – 25 May 2016

Day 4 – 26 May 2016