Lecture: Radiation Protection

An Introduction to Health Physics

PD Dr. Bastian Breustedt

Date: Thursdays 8:00h – 09:30h (Starting April 17th)
Lecture Room: Building 30.34 LTI lecture hall

Health Physics is the application of scientific principles to the protection of people from the hazards of radiation. The lectures (3 ECTS, 2 SWS) cover the basics of radiation protection (for ionizing radiation) and provide an overview of the subject. The topics which will be covered are:

- Radiation and its applications,
- Interaction of Radiation with Mater,
- Measurement of Radiation – Principles and detector designs,
- Biological Effects of Radiation,
- Measurement of Radiation – Applications and Examples
- Dosimetry of ionizing Radiation (external + internal Exposures),
- Legal Aspects (Regulation, Ethics) and
- Radiation Protection – Principles and Application

“Radiation Protection is not only a matter for science. It is a problem of philosophy, and morality, and the utmost wisdom”

Lauristion S. Taylor

The Philosophy Underlying Radiation Protection
Am. J. Roent. Vol. 77 No 5, 914-919, 1957