

Class#1:

- Introduction to the general philosophy of designing a high energy physics experimental setup
- The interaction of radiation with matter (main features will be discussed that are relevant for detector building)

Class#2

- Semiconductor Detectors, Scintillator detectors, Gaseous detectors (basic principles with examples)

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•Class#3

- Energy and momentum measurement: Calorimeter and spectrometer (basic principle, important features with example)
- Position and time measurement techniques

Class#4

- Special type of detectors with examples from high energy heavy ion collision experiments (both fixed target and collider)

Literature

Glenn F. Knoll, Radiation Detection and Measurement (Wiley)

W.R. Leo; Techniques for Nuclear and Particle Physics Experiments (Springer Verlag)