



Special safety rules for work at Detector Laboratory for the Research Training Course in Detector Technology for particle physics

Basic rule: Always when you are uncertain about the risks involved please contact the laboratory staff first !

In the following a very short description of the main potential risks you will encounter and proper procedures to minimize these risks:

- 1) **Handling of radioactive sources:** In this course you will be handling only low activity Fe-55 (and under some circumstances also Am-241) radioactive sources under the supervision of your instructors. Do not try to remove the sources from their shields and avoid close eye contact! Radiation meters are available to check the radiation levels, too.
- 2) **Gases:** P10-gas (mixed gas with 90% Ar, 10% methane) is used for the proportional chambers you will construct. You will not be handling any gas bottles, the gas will be taken directly from the outlet valves attached to work tables. To regulate the amount of the gas flow metering valves are used. Special instructions for using these gas outlet valves are attached to valves.
- 3) **Chemicals:** No special hazardous chemicals are used in this course. Glueing will take place in a fume cupboard and soldering on a work table with local exhaust.
- 4) **Electrical apparatus:** Be careful especially using High Voltage (HV) supplies, do not touch the energized parts.