

Topic	Radiation sensors for weather station of Division of Physics
Topic is suitable for	<ul style="list-style-type: none"> • practical works of bachelor students • graduation thesis of bachelor students • practical works of master students • graduation thesis of master students
Contact	Veljo Sinivee (Veljo.sinivee@ttu.ee)
Annotation	Division of Physics built a weather station that includes an ionizing radiation sensor from Teviso Inc and an experimental muon sensor. After 3 years of successive work radiation sensor failed. It should be replaced with better one. Experimental muon sensor has too little sensitive area. Design bigger sensor using P-i-N diodes. Design could also include a Geiger-Mueller counter. Should be a low-power and ruggedized device.
Expectation for candidate	<ul style="list-style-type: none"> - is familiar (or at least willing to learn) electronics - can design circuits including analog front end and controlling processor - has skills and patience to bring designed prototype to usable form (must be weatherproof and capable to run many years in outdoor conditions).

