

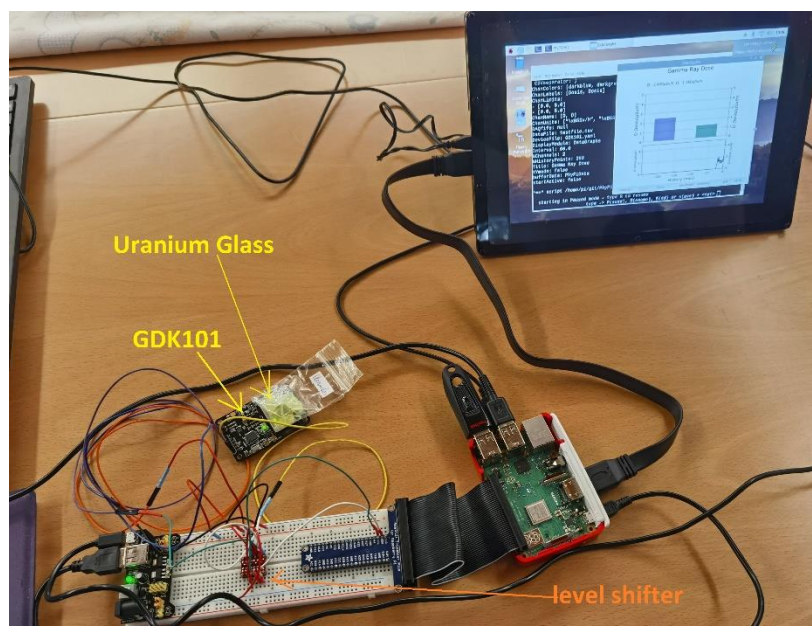
Gamma Radiation of Uranium Glass

PhyPiDAQ
Digital Measurement System Based on
Raspberry Pi



Objectives:

- Measure the natural radioactivity of environmental materials such as uranium glass by connecting the GDK101 gamma radiation sensor at the Raspberry Pi.
- Use graphical capabilities of the PhyPiDAQ-Software to visualize count rates of gamma radiation in real-time over different exposure intervals.
- Employ spreadsheets like LibreOffice or Excel to the recorded measurements to analyse the radioactive decay as random process.



Measuring the count rates of gamma radiation of environmental materials, such as uranium glass, with the GDK101 gamma radiation sensor. The 5V signals from the GDK101 gamma sensor has to be converted to the 3.3V logic level of the Raspberry Pi by means of a logic convertor.

Configurations:

-Configure the experiment and the GDK101 gamma sensor on the Graphical Interface of the PhyPiDAQ Software according to

GDK101.yaml
GammaDose1.daq

Measurements

