## Newton's Law of Cooling and the Heat Transfer

PhyPiDAQ
Digital Measurement System Based on
Raspberry Pi

Objectives:

- Measure the temperature of a cooling fluid against time by means of a 100Pt resistance temperature detector (RTD) with MAX31865 sensor connected at the Raspberry Pi.
- Use various capabilities of the PhyPiDAQ-Software to visualise the exponentially decreasing process of the temperature difference of a cooling body with respect to the surroundings in real-time.
- Employ spreadsheets like LibreOffice or Excel to calculate the decreasing rate of temperature for different substances in various quantities.
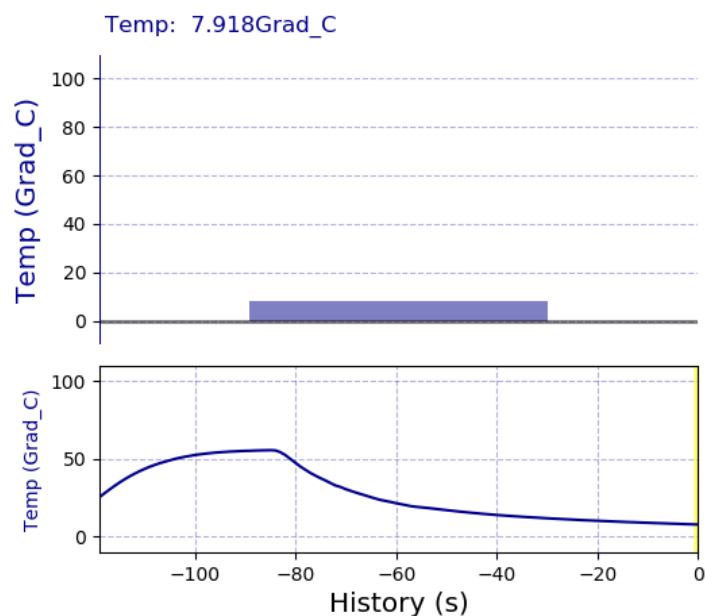
Various graphical representations on the PhyPiDAQ-window as measuring the temperature against time in cooling processes for different substances.

Configurations:	Setup

-Configure the experiment and the MAX31865 sensor on the Graphical Interface of the PhyPiDAQ Software according to
 `Termperatur_Max31865_wather.daq`
 `MAX31865Config.yaml`	

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