Postgraduate Environmental Physics / Space Lab 1 (summer 2024):

## General structure of the protocol for the practical

The protocol of the experiment should consist of the following points:

- 0. **Title of the experiment**; group and name of the students; date
- 1. Introduction: Short description of the experiment and its objectives
- Theoretical background: Scientific background on which the experiment is based (1. Why is the measured quantity important, what is it important for;
  2. Physics behind the measurement method)
- 3. Experimental set up: Description of the set up used; components and their principle of operation
- 4. **Experimental procedure**: Description of each step followed during the experiment, indicating the time and all relevant details
- 5. **Data analysis**: Description of the data obtained, format and conversion procedures required to obtain the results for interpretation
- 6. **Results and error analysis**: Final mathematical results, giving also the units and with the corresponding associated error. A detailed description of the error analysis should also be included
- 7. **Discussion of results**: Interpretation of the final results in relation to the objectives of the experiment. You can use the questions given in the instructions for the experiment as a guideline
- 8. Appendix: Raw data in a table or in digital form

The report should be about 6 - 8 pages excluding the appendix. We suggest to use Times-Roman or a similar font at size 11pt with line spacing of 1.5.

## Please use your own words to elaborate the protocol, in particular the points 1 to 4. A simple reproduction of the text given in the instructions for the experiment or the internet will <u>NOT</u> be accepted.

If you have specific questions to one of the experiments, please contact the corresponding tutor. If you have more general questions, please contact

Andreas Richter		Christian Mertens	
Room:	U-2090	Room:	M-3140
Phone:	218-62103	Phone:	218-62165
e-mail :	richter@iup.physik.uni-bremen.de	e-mail: <u>cmertens@physik.uni-bremen.de</u>	