How to write a lab course protocol

Here we give a few advices regarding the writing of a protocol within the scope of the astrophysical lab course. We aim to give an overview over what should be included in those protocols and which guidelines need to be followed.

A typical protocol should consist of the following sections:

1. a theoretical part that explains the background need to understand the topic of the protocol
2. a general description of the observation, the data reduction, and the data analysis
3. the presentation of the results
4. a discussion of the results with respect to literature values, plausibility, uncertainties, and possible error sources
5. a reference list

Some general remarks:

- **first of all:** use your **own** words
  - Please be aware that the supervisors (which will evaluate your protocol) already read dozens of other protocols. Hence, they will immediately recognize whether you have copied text from e.g. the Internet, which is considered to be a plagiarism and which will result in an immediate disqualification.
- state the origin of each figure that is not made by yourself
- the protocol should include the figures from the data reduction, however only one example of each type is needed in the main part of the protocol, additional figures should be attached as an appendix

An example for a good, although not perfect, N2 protocol can be found here (many thanks to Tomer Shenar and Christoph Guber for providing this file).