iMarsys Mini projects general Guidelines

The mini projects are carried out in the research working groups of the IMF. Each student is asked to choose from the provided list of topics and normally switch working groups between iMarsys 6 and iMarsys 7. Once topics are chosen and are distributed the students need to contact the supervisors and will then be brought in contact with the respective researchers to work with.

The topics are divided into roughly two phases: a preparatory first phase after which students will hand in a small (1-2 pages) Exposé; details follow below. The second phase will then involve the actual work on the research topic (e.g experiment in the lab, field work, in silico experiments, extensive literature research, data analysis; just to name a few). To finish this second phase students will have to hand in a research paper-like written piece of work; details follow below.

The following are general guidelines on procedures for the Mini projects but can be adjusted within the individual working groups and according to the projects done. The final written documents (Exposé and Paper) need to be handed in according to submission dates.

Evaluation and grading: there is an evaluation sheet that every working group will use to grade the individual exposés and research papers.

iMarsys Mini projects Summer Semester 2021 Specifics

Submission date of Exposé:

31st of May 2021

Submission date of Research Paper:

open

The current situation with COVID-19 only allows restricted access to the experimental facilities of the institute and work in the lab. Please check individually with the supervisors what is possible (they are making sure, that you can do as much practical work as possible currently). This semester, there is no need to change the working groups (in contrast to what it says in the general guidelines).

First phase and writing the Exposé:

- Literature research (minimum 15 peer-reviewed). Please use a consistent citation format (e.g. Literature Citation Style, Mendeley)
- Come up with research objectives: 2-4 research questions that will be answered / addressed
- Write an exposé of 1-2 page describing shortly the relevance of the work being done, the objectives and very briefly how you are going to address your research question (basic material & methods and timeline
- The materials and methods should include information / ideas on the type(s) of statistical analyses appropriate for the data to be collected.

Second phase and writing the research "paper":

- Start practical work: lab, in silico, in the field etc.
- start writing and thinking about the research paper early enough
- regular feedback and meeting with supervisors (initiated by students) is crucial

- Carefully check about how a paper is structured (see PDF about "how to write a scientific paper") → reading a lot of publications with an eye for detail will help you get a feeling for what a good paper looks like
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 Presentation of work in voluntary presentations towards the end of semester to promote interaction between students