

Module 1 of the IFA challenge track program is concerned with physical problems in classical mechanics and take place in weeks 38-44 (exact dates to be announced).

Module aims

In this module you are asked to:

- Identify a 'real-world' problem which may be tackled using classical mechanics.
- Perform a literature review to identify the physics concepts relevant to the problem.
- Apply the concepts identified in the context of a concrete example situation.
- Produce a short report on the physics of your chosen topic.
- Communicate your topic and example situation to your peers via poster and oral presentations.

Selecting a topic

The choice of topic is entirely your own. You will, however, meet with an instructor before the module begins to discuss your choice and ensure its feasibility and appropriateness. In preparation for this you should aim to have a project title and short (few-sentences long) description ready before the meeting. These meetings will take place in week 39, and will be scheduled once the total number of participants is known.

Café sessions

During the course there will be weekly meeting times (café sessions) where you can discuss the status of your project with both instructors and your peers. These meeting times will be announced shortly after the sign-up deadline.

Evaluation

The end products of module 1 are a short report (between 1500 and 2500 words), a poster and a 12-minute oral presentation.

Acquired skills

By the conclusion of this module you should be able to:

- Perform a literature review on a given topic and identify the key concepts.
- Write in a scientific style, communicating ideas succinctly and precisely.
- Communicate important ideas and concepts effectively through the use of poster and oral presentations.
- Critically assess scientific content created by your peers.

Important dates

Deadline for signing up to the module: Sunday 17/9

Send an email to Oliver Kirsebom (oliskir@phys.au.dk), including your student number and FYS-team number.

Introductory meeting: Week 38 (exact time and date to follow)

The course coordinator will give an overview of what to expect in Module 1.