Syllabus

for course in education at postgraduate level Kollokvier i fysik Physics Colloquia

10 Högskolepoäng 10 ECTS credits Course code: Valid from: Established: Department

Subject:

FK40001 Spring 2018 2017-12-14 Department of Physics

Physics, Theoretical physics

Decision

This course plan has been adopted by Fysikum's board on 12/14/2017.

Prerequisites and special admittance requirements

Admitted to graduate level education

Learning outcome

The course aims to broaden the doctoral student's knowledge of the research area (theoretical physics or physics)

Content

In consultation with the course supervisor, the doctoral student chooses 10 colloquia during the first two years of study to be included in the course. The course supervisor is responsible for ensuring that the selected colloquia really provide the expected broadening of knowledge and insights in the research area. This is done by including colloquia in all the areas defined below as part of the doctoral course selection of colloquia. Before the chosen colloquium, the doctoral students who have chosen this go through appropriate background material together with one of the Physics teachers. The material can consist, for example, of an overview article that provides background to the area and possibly also a more specialized article in the topic of the colloquium when this is known in advance. After the colloquium, each of the participating PhD students writes a short report (1-2 pages) summarizing the colloquium content and also includes any issues that were raised and can be discussed further. Responsible teacher leads one joint follow-up discussion of the colloquium together with the doctoral students where the reports and any questions around the colloquium is discussed.

Areas:

The 10 colloquia must, in consultation with the course supervisor, be distributed reasonably evenly between the following areas:

- Nuclear physics, particle physics, astroparticle physics, cosmology
- Atomic physics, molecular physics and quantum optics
- Condensed matter physics, surface physics and fluid physics

• Other physics

Previously held and recorded colloquia can be used for the course, but primarily colloquia given during the course period should be used..

Report:

The report must contain:

- A short summary of the colloquium's content with a focus on physical problems
- What was new for the PhD student
- Why the material/area is important
- An outlook for the future with potential further developments
- Feedback to the colloquium committee regarding the content and level of the colloquium

Form of instruction

Teaching consists of lectures and seminars.

Participation in lectures and seminars is mandatory. If there are special reasons, the examiner can, after consultation with the relevant teacher, grant the student exemption from the obligation to participate in certain compulsory teaching.

The course is taught in English.

Forms of examination

a. The course is examined in the following way: For an approved colloquium, the following is required:

- Active participation in preparatory and closing discussion meetings where familiarity with the material distributed in advance is demonstrated
- Attendance at the colloquium
- Submitted report according to the template above

The assessment is made by the responsible teacher who also summarizes and forwards the participants' feedback to the colloquium committee and informs the course supervisor of the approved colloquium. If the teaching takes place in English, the examination may also be conducted in English.

b. The course is graded as Pass or Fail.

c. The course's grading criteria are distributed at the start of the course.

d. Students who fail the regular exam have the right to undergo additional exams as long as the course is given. The number of test occasions is not limited. Other compulsory course parts are also equated with exams.

Transitional provisions

Students can request that the examination be carried out according to this syllabus even after it has ceased to apply, however, no more than three times during a two-year period after teaching on the course has ended. This should be requested to the institution's board. The provision also applies when revising the syllabus.