**Sensorveiledning FYS4565/FYS9565 vår 2019**

Utarbeidet av faglærer Erik Adli (UiO) i samarbeid med Prof. Are Strandlie (NTNU)

The lectures have consisted of two parts: the physics of particle accelerators (L1-L6, L8-L9, L13) and the applications of particle accelerators (L7, L10-L12).

The oral exam will also consists of two parts. Each student will draw one topic on the accelerators physics, and one topic on the applications.

Examples of accelerator physics topics : structures and acceleration techniques, transverse dynamics, relativistic fields and radiation, different accelerator types, advanced accelerator research.

Examples of application topics : colliders, photon/neutron science facilitites, proton drivers including muon and neutrino beams, medical accelerators.

The grading will follow these guidelines:

A-B: requires a good discussion of both the accelerator physics and the applications part, or, an excellent knowledge of the accelerator physics part and ok knowledge of the applications.

C-D: required a good discussion of one of the parts and ok performance for the other parts.

E: requires an ok discussion of one of the parts.