

# **SK2905 – Superconductivity and other quantum liquids, 7.5 credits**

## **Course analysis - autumn 2022**

### **Basic information**

The course was given in period 2, autumn 2022, and had 12 active students. Course responsible was Magnus Andersson. The course consisted of two parts:

PRO1 (3.0 credits): Project work

IMU1 (4.5 credits): Oral examination

### **Intended learning outcomes**

After finished course the student should be able to:

- apply basic theory and concepts of superconductivity
- analyze and evaluate superconducting applications
- apply basic concepts for other quantum fluids

### **Pedagogic development**

To better reflect the change in examination practices after the pandemic, the examination parts in Ladok were renamed from INL1 hand-in problems (3.0 credits) and TEN1 written exam (4.5 credits) to PRO1 project work (3.0 credits) and IMU1 hand-in problem with a final oral exam (4.5 credits). The grading in the course was clarified and slightly changed.

### **Quantitative data**

11 out of 12 active students have passed the course. The last student has passed the oral examination part of the course.

### **Course assessment**

Students could continuously give their opinions during the course. Due to an administrative mistake, the final course questionnaire was not opened for students after the end of the course.

### **General conclusions**

The course is seemingly working quite well based on the comment given during lectures. There is still some more work to be done on the course material for the quantum liquid part of the course.

## **Examination**

The examination methods have been under development and has turned out to work reasonably well. Some minor clarifications about the oral examinations are still needed.

## **Summary for next year's course**

There are two minor things that need to be improved for the next year's course.

- Some minor clarifications about the oral examinations are needed.
- The course material on quantum liquids and gases can still be improved.