

Master M1 Sciences de la Matière – ENS de Lyon – 2021-2022

*Superconductivity, Superfluidity and Magnetism*

# **Title of the report**

Team: Name no. 1, Name no. 2, ...

April 4, 2022

## **Abstract**

Here goes a short summary of the article, containing a statement of the physical problem, the methods used and the main results.

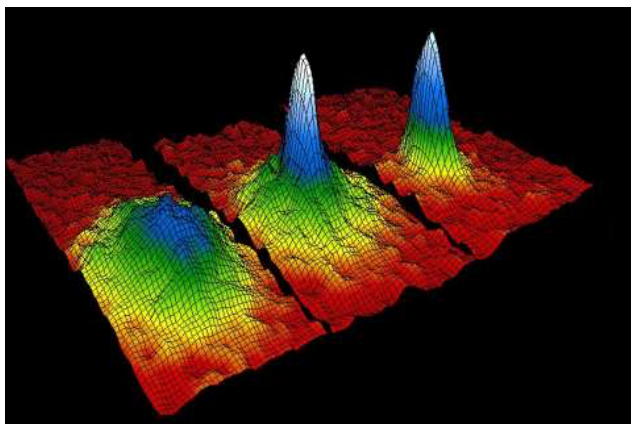


Figure 1: Here goes the caption of the figure.

## 1 First section

Your report should contain a concise analysis of the assigned research article (with reference to any further material that you may find useful). The idea of the report is to show that you understand the article (its physical results, as well as the techniques that led to them), and to identify the largest number of elements discussed in the lectures which have a relationship with the material of the article.

As a general guideline on how to proceed: identify which fundamental phenomena – connected with condensation, superfluidity or superconductivity – are explored in the article; identify which experimental methods are used to explore these phenomena; and which specific physical observables have been measured with these methods in order to offer conclusive evidence of a phenomenon. You can also be critical if you find that the evidence offered for a particular phenomenon, or the explanation of the observation presented, are not sufficiently convincing.

Many of the things discussed in the article may be technical, and hard to understand if one is not an expert in the field – but this should not distract you from the main questions. Skip the details that you do not understand if you do not consider them essential to the main message of the article. This is how professional researchers as well read articles!

You should cite carefully the literature that guided you, following this example [1]. Figures should be included as in the example above, and referenced as Fig. 1.

The length of your report should not exceed 10 pages (front page and bibliography included!), using a 11pt font and simple spacing between lines as in the format of this template. Any text/figures beyond page no. 10 will simply not be read!

You can write your report in English - *ou bien le rapport peut être écrit en français, si cela vous convient mieux.*

## 2 Second section

Blah blah...

## References

- [1] M. H. Anderson, J. R. Ensher, M. R. Matthews, C. E. Wieman, and E. A. Cornell, *Observation of Bose-Einstein Condensation in a Dilute Atomic Vapor*, Science 269, 198 (1995).