

Physics 596 – Fall 2020

Scientific Ethics Case Study #14*

You are a member of a group of students working on a large project, and you are ready to write your final report on your part of the project. One of the graduate students in the group gave you a figure that he had made of the thermal conductivity data and told you that you could use it in your report. But you didn't think the figure was large enough to reproduce well in your paper, and since you knew how to use the apparatus and access the raw data, you downloaded it again to make a more attractive plot. When you did so, you were shocked to see that the data that were presented in the figure as being from one specimen were actually taken from three different specimens. The graduate student had created a false impression of reversibility in his figure by gathering together data that were actually on different samples.

What should you do?

Should you confront the graduate student?

Should you inform the faculty member?

Your final report is not going to be “published” anywhere. Does that make a difference?

***Before discussing the case:** Identify people in the group for the following presentation duties: (i) A person to present the ‘case’ in their own words to the rest of the class; (ii) a person to present one point of view in this study; (iii) a person to present the opposing point of view; and (iv) a person to lead a class discussion of the case. Feel free to take notes as necessary to present your discussions to the class.

Discuss this case study with your team and prepare to relate your discussions to the rest of the class.