PHYS 496—Beck/Elliott, Spring 2014

Homework Assignment #6, Composing Effective Figures and Captions

This assignment consists of two parts-making figures and writing captions.

Use the <u>data provided</u> as input for your figures. Your figures should be suitable for publication in a scientific paper.

Each figure should be accompanied by a complete, stand-alone, descriptive figure caption. You will thus complete <u>four separate elements</u> for this assignment: 1) a figure that shows ³He experimental data plotted against a theory curve; 2) a caption for the plot; 3) a schematic diagram or flowchart illustrating the steps in the space-time problem; and 4) a caption for the illustration.

An excellent resource is <u>LabWrite Resources</u> from North Carolina State University and the National Science Foundation. The website includes a <u>step-by-step tutorial</u> on how to use Excel to create graphs. After you've completed the first draft of your figures, consult "<u>Revising your</u> <u>Visuals</u>" for tips on how to improve them.

For an example of how scientists use different kinds of figures to tell parts of the same story, see the Web article on <u>epitaxy</u> by the Technical University of Münich. The photo of the MBE set-up is not very useful (although it's an impressive display of expensive stainless steel), and the captions are not sufficient for a journal article, but they're okay for a web page.

Due: <u>Friday, March 14, 6:00 PM</u>. Email your two figures and two captions to both Professor Beck and Celia. Assignments submitted after the deadline will be downgraded and will be ineligible for rewrite points.

Total—100 points (25 points for each figure and 25 points for each caption)