

# PSI Dark Matter Homework #3

Due: Apr. 27, 2012

## Science Communication

A really important part of being a scientist is communicating with your peers (both experts and non-experts in your specific field) as well as the general public. One aspect of this is the ability to explain your research in a clear and concise way. This homework is meant to give some practice at this.

1. Choose a specific topic related to dark matter that you find interesting. Let me know about the topic via email (dmorri@triumf.ca) and I'll suggest a recent research paper on the subject for you to read. If the suggested paper doesn't seem interesting, repeat the steps above until we converge on one that does.
2. Read the paper.
3. Write a brief summary of the paper. It should be a few paragraphs long (few = three or so) with no more than a few equations. You should address the motivation for the research, describe what they actually did in the paper, and say a few words about the implications of the work. Your target reader should be a fellow PSI student who knows a little cosmology but who did not take this specific course on DM.  
*Hint: don't overestimate what the reader knows. Also, try to be as concise and direct as possible.*
4. Suppose the paper you read was actually your own work. Suppose as well that you get on an elevator with a non-scientist who strikes up a conversation and asks you about your research. Write up how you would reply with a description of what you did in your recent paper that you could deliver before you have to get off the elevator a few floors up.  
*Hint: "a few floors up" corresponds to a few simple sentences. And make sure your description understandable to the non-expert.*
5. Write this stuff in LaTeX and email it to me (not Tibra or Ross) as a .pdf document for grading by Apr. 27.