An Open Challenge to the SPS

Figure 1: The House from Pixar's Up

We, the first year graduate students at our beloved Cornell University, do you, the undergraduate physics major members of the Society for Physics Students, challenge.

As you will see in Figure 1 above (courtesy Pixar et al 2009), the premise of their latest blockbuster featured a geriatric crochety old man who aims to escape the world by utilizing his left over stock of party balloons from his balloon selling business. Your task to estimate how many party balloons you would need to lift his 1.5 story quaint home. What is the weight of these balloons? Is the weight of the strings important? Is his wiring optimum? What would be the diameter of these balloons compared to the house? Is the above picture accurate? As a follow: Calculate the tension in the strings, and discuss whether this is of concern.

We will show up next Friday December 4th, 2009 at approximately 12 p.m., at which point, a representative of your choosing must explain the above. In addition, we challenge you to come up with similarly interesting problem to challenge us with. Please email your questions to aaa244@cornell.edu as soon as possible.