Danny and Manual

This week we have started looking at the velocity and effects of plasma waves inside the sun's corona and photosphere. We have recently decided that our project will deal with Alfven Waves from a mathematical perspective. What we mean to present in our poster is the equations, solutions and characteristics of these waves, as well as to why they are important. Alfven waves are waves in plasma and are believed to be the reason for the discrepancies between the temperature of the outer layer of the sun and the corona. This is due to the fact that once they reach the Corona of the sun, they become shock waves and release large amounts of energy as heat. Our equations for the transfer of heat depend on "v" which is the velocity of the Alfven wave. Thus we have set graphs of "v" vs. "mass density" with different magnetic fields as are expected to be found in the sun. On our first graph we put values of mass density and velocity as found in the Corona of the sun and in our second graph we see the velocity of the wave when it goes through the mass density of the photosphere of the sun.