

AVALANCHING OF PROLATE GRANULAR MATERIALS. *Kenneth Desmond,
Dr. Scott Franklin*, Department of Physics, Ken147852@aol.com*

I have been studying the properties of avalanching in prolate granular materials. Prolate granular materials are materials that have an aspect ratio greater than 1 (aspect ratio = length/diameter). The property that I have mostly studied is the repose angle. The repose angle is the angle at which an avalanche will begin to occur and the angle at which the avalanche will stabilize. Metal wire is cut to a specific aspect ratio, and then placed without overlap between two sheets of Plexiglas. The two pieces of Plexiglas are cut into circles, and the system is then rotated. Video recording captures the rotating system, and the avalanching of the two dimensional pile of wires is studied. Most of my studies have also included finding better methods in the setup for collecting data, along with improving methods of analyzing the data that I have collected.