Esteemed parents and Physics Students.

This year we are going to use smartphones to gather data at Oaks Park!!!

One aspect of the data gathering will be taking a "tripod" video of the ride. (A video where the phone is held stationary) To that end - if you have a tripod for a smartphone, that will help greatly, but we can make do if this is something you don't have. From these videos we can derive position data and analyze that for accelerations.

The other aspect is using the accelerometers that are built into smartphones. To that end, I will need at least one student in each group to purchase the app "Sensor Kinetics Pro" (The free version doesn't let you save data...) It is available for $0.99 for IOS, and $2.99 for Android (the Android version is more expensive because the app is more sophisticated - allowing recording of multiple sensors at a time). This app can record accelerometer data in three directions, and save it in a format we can import into Graphical Analysis on the Chromebooks, where we can graph it, and analyze it.

I would recommend that all the students in a group that are going to the park download the app - as it is relatively cheap, and it would be a good backup in case a phone runs out of charge or something.

Yours in Physics,

Chris Murray