- Open file U2019.cmbl using Logger Pro.

- On page 3 create a graph of force versus position with a curve fit of the form $F = Ax + Bx^3$. (Use "Define function" in Curve Fit tools.)

- Use calculus to determine an appropriate potential energy function based on force measurements.

- Under the Data menu use New Calculated Column to create columns showing: kinetic energy, potential energy, and total energy.

- Add a page to the file and create a graph showing all three energy values.

- Print both graphs. On the force graph show the work detailing how the potential energy function was determined.

Cart with WDSS Force Sensor measures force from springs

CBR Motion Detector