

Conservation of Mechanical Energy

Part 3

If the marble is constantly losing energy to friction and air disturbance, then the discrepancy between the theoretical (conservative) prediction for the energy and actual value of the energy should grow as the marble rolls further down the track. Let's put this to the test...

- Add one more column to your spreadsheet titled `Ediff2`. This column will be the difference between the theoretical value for energy and the *measured* energy (now including rotational energy). Do the values meet your expectations?
- Make a plot of `position` versus `Ediff2`. What do you observe?