## Physics 1100

## Empirical Equation for the Time of Oscillation of a Ring Pendulum

Here is a photo of ring 1 (the smallest).


Use this photo to determine the ones and tenths place (location of the zero tick mark on the sliding scale).


Use this close up photo of the sliding scale to determine the hundredth and thousandth place. These sliding scale photos avoid introducing error by parallax since care was taken when positioning the camera lens.


Here's a photo of the ring's thickness (all the rings have the same thickness).


Use these two photos to measure the ring's thickness the same way as above.


Although not pictured, ring number 2 was placed inside the jaws of this caliper for measurement.


Only one photograph is needed for this measurement.


Here's a photo of Vernier calipers after placing ring number 3 inside its jaws.


Here is a photograph of ring number 4.


The caliper was then placed on a meter stick. Use the two photos to measure the length of its diameter.


Here is ring number 5.


Here is ring number 6.


