## PHY224 Introductory Exercise: Oscillations of a hoop

Goal: to determine the acceleration due to gravity

Materials: 4 hoops, stand with knife support, stop watch, meter stick, caliper.

Method: Your choice.

Warning: Treat the hoops with care! They are easily deformed. Do not mark the hoops: use masking tape instead

## To do:

- 1. Determine if the hoops are round,
- 2. Determine the period of small oscillations for each hoop,
- 3. Determine g: acceleration due to gravity,
- 4. Provide a complete estimate of experimental uncertainties encountered in this experiment,

Submit the report individually, online (Quercus), a week from the date you complete the exercise. The report writing style has to be *informal*.

The exercise is marked pass/fail. The threshold is 70.