## EN PHYS 131 - EZ02

Eric Koch ekoch@ualberta.ca CCIS 2-098 e-koch.github.io

- See lab schedule on Dept. of Physics website
  - Undergraduate Laboratories -> Schedules
  - Lab dates: Feb. 12, Mar. 4, Mar. 18, & Apr. 1
- Labs due following Monday dropbox on L2 (same hallway as before)
- A lab template is posted to my website
- Lab supervisor is Wladek Rudzinski (wjr@ualberta.ca; CCIS L1-183)

## EN PHYS 131 - EZ02 Lab 6 - Due Feb. 1 5PM

## Procedure:

- 1. Take video of one partner dropping a ball, while holding a metre stick
- 2. Download LoggerPro send video to laptop and load into LoggerPro
- 3. Record information from video (see lab manual)
- 4. Fit one of the curves (see equations on right). Find g from the fit values and the error. Error propagation equations are in the yellow pages.
- Save both plots. One should clearly show the values from your fit.

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$$y = y_0 + v_0 t - \frac{1}{2}gt^2$$
$$v = v_0 - gt$$
$$g = 9.81 \text{m/s}^2$$

## In report:

- 2 plots position & velocity
- Value for g and its error
- Briefly explain the other variables in your fit (ex. what value do you expect for  $v_0$ ?)